

# DOJ 25 Cities Program Contacts

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# Department of Justice High-Risk Metropolitan Area Interoperability Assistance Project *Atlanta, Georgia*



## Addressing Interoperability

The Department of Justice (DOJ) Wireless Management Office (WMO) is working to improve long-term federal interagency communications across the Nation. As an interim step, and as a response to a request from the House/Senate CJS Appropriations Subcommittee staff, the DOJ WMO has been leading the High-Risk Metropolitan Area Interoperability Assistance Project (“25 Cities”) to provide targeted cities with basic and immediate interagency communications capabilities among local, state, and federal agencies during emergency response. Twenty-five cities were selected by criteria including perceived risk and population size. As stakeholders in 1 of the 25 cities, Atlanta metropolitan area local, state, and federal public safety agencies have been working collaboratively with the DOJ WMO to address basic interoperable communications.

## Participating Agencies

Partnership among Atlanta area local, state, and federal public safety agencies has been instrumental in the development of comprehensive interoperability solution sets. Participating agencies have included—

- Bureau of Alcohol, Tobacco, Firearms, and Explosives
- City of Atlanta
- Clayton County
- Cobb County
- Coweta County
- De Kalb County
- Drug Enforcement Administration
- Fayette County
- Federal Bureau of Investigation (FBI)
- Fulton County
- Henry County
- Georgia Bureau of Investigation
- Georgia Dome/Georgia World Congress Center Police
- Georgia Emergency Management Agency
- Georgia State Patrol
- Gwinnett County
- Metropolitan Atlanta Rapid Transit Authority
- U.S. Customs and Border Protection
- U.S. Marshals Service
- U.S. National Park Service
- U.S. Postal Inspection Service
- U.S. Secret Service

## Key Successes

DOJ and area stakeholders successfully achieved basic interoperability and emergency response communications improvements in the Atlanta metropolitan area through the implementation of several interoperability solutions. The solutions, which leverage existing disparate communications systems, provide new wide-area interoperability capabilities. Additionally, in the course of meeting this project’s interoperability goals, federal stakeholders were able to expand the working relationships among other federal agencies, as well as key local and state agencies, to foster the development of new interoperability objectives for the area.

A federal interoperability channel was implemented to support federal agencies with communications during an emergency response. DOJ installed a 125-watt conventional repeater to provide reliable coverage throughout the metropolitan area. Hosted and maintained by the FBI, the new very high frequency (VHF) narrowband interoperability channel provides a means for communications among command and control personnel during emergency responses.

To support interoperability among public safety radio systems in the immediate metropolitan area, four fixed audio switches were implemented between two area dispatch centers: two switches at the Atlanta FBI field office and two switches at the Fayette County dispatch center. The audio switches were outfitted with VHF, UHF, and 800 megahertz control stations to link disparate, and out-of-band radio systems. The audio switches can be used to enable an “always-on” net for long-term operations or an ad hoc patch for immediate, short-term interoperable communications. In addition, audio switch operators can patch the federal interoperability channel with participating agencies’ radio systems to provide interagency communications between federal agencies and local and state agencies.

In addition to providing equipment and installation services, DOJ ensured that FBI and Fayette County technicians received training from the audio switch manufacturer, JPS Communications, to effectively operate the new equipment and interoperability capabilities.

To address management issues of the new interoperability equipment, DOJ worked with several stakeholders to develop standard operating procedures (SOP) to outline the use of communications equipment and to ensure proper operation of interoperability resources. Development of SOPs is ongoing—key stakeholders continually update and revise the documents to meet their changing requirements.

## Moving Forward

The cooperation and support between participating agencies and DOJ WMO provided scalable solutions designed to give additional agencies future access to the interoperability solutions. Sustained operations, maintenance, and support of these interoperability solutions will be coordinated by key stakeholders. These efforts, along with stakeholder support, will ensure continuity in addressing interoperable communications among public safety agencies in the Atlanta metropolitan area.

## Contact Information

If you would like to know more about this initiative and the interoperability solutions, please contact—

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# Department of Justice

## High-Risk Metropolitan Area Interoperability Assistance Project

### Baltimore, Maryland

#### Addressing Interoperability

The Department of Justice (DOJ) Wireless Management Office (WMO) is working to improve long-term federal interagency communications across the Nation. As an interim step, and as a response to a request from the House/Senate CJS Appropriations Subcommittee staff, the DOJ WMO has been leading the High-Risk Metropolitan Area Interoperability Assistance Project (“25 Cities”) to provide targeted cities with basic and immediate interagency communications capabilities among local, state, and federal agencies during emergency response. Twenty-five cities were selected using criteria that included perceived risk and population size. As stakeholders in 1 of the 25 cities, Baltimore metropolitan area, local, state, and federal public safety agencies have been working collaboratively with the DOJ WMO to address basic interoperable communications.

#### Participating Agencies

Partnership among Baltimore area local, state, and federal public safety agencies has been instrumental in the development of comprehensive interoperability solution sets. Participating agencies have included—

- Anne Arundel County
- Baltimore County
- Bureau of Alcohol, Tobacco, Firearms, and Explosives (ATF)
- City of Baltimore
- Drug Enforcement Administration (DEA)
- Federal Bureau of Investigation (FBI)
- Federal Protective Service (FPS)
- Howard County
- Maryland Department of Natural Resources Police
- Maryland Emergency Management Agency
- Maryland Institute for Emergency Medical Services Systems
- Maryland State Police
- Maryland Transportation Authority Police
- U.S. Coast Guard (USCG)
- U.S. Customs and Border Protection (CBP)
- U.S. Immigration and Customs Enforcement (ICE)
- U.S. Marshals Service (USMS)
- U.S. Park Police (USPP)
- U.S. Postal Inspection Service (USPIS)
- U.S. Secret Service (USSS)

#### Key Successes

DOJ and area stakeholders successfully achieved basic interoperability and emergency response communications improvements in the Baltimore metropolitan area through the implementation of two interoperability solutions. The solutions introduce a new wide-area interoperability resource and also support the use of existing, disparate interoperability and communications systems by extending coverage, capacity, and availability to more public safety agencies. Additionally, in the course of meeting this project’s interoperability goals, stakeholders were able to foster a working relationship between local, state, and federal agencies to resolve interoperability objectives for the area.

The first solution implemented a federal interoperability channel to support interagency communications during an emergency response. DOJ installed a 350-watt conventional narrowband repeater and five voted receivers strategically located to provide portable coverage throughout the Baltimore metropolitan area. Hosted and maintained by the FBI, the new very high frequency (VHF) interoperability channel provides a means for wide-area interagency communications where that capability had not existed

previously. While primarily reserved for communications among command and control personnel during emergency responses, the channel can be used for daily operations that involve interagency communications.

Federal agencies that have direct access to the federal interoperability channel include—ATF, CBP, ICE, DEA, FBI, USMS, USPP, and USSS. This federal interoperability channel can be patched into key local and state agency communications systems throughout the region via radio frequency control stations located at the dispatch centers. Control stations were installed at City of Baltimore, DEA, FPS, Maryland State Police, USPIS, and USPP dispatch centers to provide access to the federal interoperability channel. Through these various methods of connectivity, the new federal interoperability channel enables local, state, and federal agencies operating on disparate radio systems to communicate while using their own agency’s radio system.

To support interoperable communications on-scene, the second solution provided a mobile audio switch, a variety of VHF, ultra high frequency (UHF), and 800 megahertz radios, and connecting cables to support various radio systems. The mobile audio switch is operated, maintained, and available for interagency deployment by the FBI. In addition to providing support during emergency responses, the mobile audio switch supports routine, short-term tactical engagements and complements other existing mobile audio switches in use throughout the Baltimore metropolitan area.

To coordinate common operating procedures for the new interoperability solutions, DOJ is working with the Central Maryland Area Regional Communications Committee (CMARC) to identify federal participants to join the local and state agency members. This collaborative effort will result in the development of standard operating procedures to address rules of use for operating on the federal interoperability channel and deploying the mobile resource. Stakeholders continue to meet to discuss interoperability efforts in the Baltimore metropolitan area.

#### Moving Forward

The cooperation and support between participating agencies and DOJ WMO provided scalable solutions designed to give additional agencies future access to the interoperability solutions. Sustained operations, maintenance, and support of these interoperability solutions will be coordinated by key stakeholders. These efforts, along with stakeholder support, will ensure continuity in addressing interoperable communications among public safety agencies in the Baltimore metropolitan area.

#### Contact Information

If you would like to know more about this initiative and the interoperability solutions, please contact—

##### Federal Interoperability Channel/FBI Mobile Audio Switch

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# Department of Justice

## High-Risk Metropolitan Area Interoperability Assistance Project

### *Boston, Massachusetts*



#### Addressing Interoperability

The Department of Justice (DOJ) Wireless Management Office (WMO) is working to improve long-term federal interagency communications across the Nation. As an interim step, and as a response to a request from the House/Senate CJS Appropriations Subcommittee staff, the DOJ WMO has been leading the High-Risk Metropolitan Area Interoperability Assistance Project (“25 Cities”) to provide targeted cities with basic and immediate interagency communications capabilities among local, state, and federal agencies during emergency response. Twenty-five cities were selected by criteria including perceived risk and population size. As stakeholders in 1 of the 25 cities, Boston metropolitan area local, state, and federal public safety agencies have been working collaboratively with the DOJ WMO to address basic interoperable communications.

#### Participating Agencies

Partnership among Boston area local, state, and federal public safety agencies has been instrumental in the development of comprehensive interoperability solution sets. Participating agencies have included—

- Boston Fire Department (BFD)
- Boston Police Department (BPD)
- Bureau of Alcohol, Tobacco, Firearms, and Explosives
- Drug Enforcement Administration
- Federal Bureau of Investigation (FBI)
- Federal Emergency Management
- Federal Protective Service (FPS)
- Massachusetts Bay Transportation Authority
- Massachusetts Emergency Management Agency
- Massachusetts Environmental Police
- Massachusetts Port Authority
- Massachusetts State Police
- U.S. Coast Guard (USCG)
- U.S. Customs and Border Protection
- U.S. Immigration and Customs Enforcement
- U.S. Marshals Service
- U.S. Secret Service

#### Key Successes

DOJ and area stakeholders successfully addressed basic interoperability and emergency response communications improvements in the Boston metropolitan area through the implementation of several interoperability solutions. The solutions, which leverage existing disparate communications systems, provide new wide-area interoperability capabilities. Additionally, in the course of meeting this project’s interoperability goals, stakeholders were able to leverage and expand the working relationship among local, state, and federal agencies to resolve interoperability objectives for the area.

The primary solution provides redundant wide-area interagency communications via the implementation of a backup repeater for an existing BPD wideband, very high frequency (VHF) channel that is linked directly to the BPD ultra high frequency (UHF) system. BPD dispatchers can use this channel to patch federal emergency response personnel on VHF radio systems to local and state personnel on UHF and 800 megahertz (MHz) systems (e.g., the Boston Area Police Emergency Radio Network [BAPERN] and an ITAC/ICALL channel). In order for BFD and FPS personnel to also have the capabilities to monitor and patch

resources to the BPD VHF interoperability channel, DOJ provided BFD and FPS each with a VHF control station. In addition, DOJ implemented UHF and 800 MHz control stations at the FBI dispatch center to enable wireless linking, on an as-needed basis, to local and state systems operating in those frequency bands, as well as to other UHF and 800 MHz systems.

DOJ also improved interagency communications among local, state, and federal agencies during emergency maritime response. DOJ implemented a VHF standalone repeater on a USCG maritime channel. This maritime channel also supports regular USCG liquid natural gas operations.

To coordinate common operating procedures for the new interoperability solutions, DOJ worked with local, state, and federal stakeholders. This collaborative effort resulted in the development of SOPs and an interoperability resource guide to address rules of use for channel patching. The interoperability resource guide, a tri-fold document, was developed as a quick reference guide that documents pertinent information about interagency channels, radio caches, and audio switches in the Boston metropolitan area.

#### Moving Forward

The cooperation and support between participating agencies and DOJ WMO provided scalable solutions designed to give additional agencies future access to the interoperability solutions. Sustained operations, maintenance, and support of these interoperability solutions will be coordinated by key stakeholders. These efforts, along with stakeholder support, will ensure continuity in addressing interoperable communications among public safety agencies in the Boston metropolitan area.

#### Contact Information

If you would like to know more about this initiative and the interoperability solutions, please contact—

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# Department of Justice

## High-Risk Metropolitan Area Interoperability Assistance Project

### Charlotte, North Carolina



#### Addressing Interoperability

The Department of Justice (DOJ) Wireless Management Office (WMO) is working to improve long-term federal interagency communications across the Nation. As an interim step, and as a response to a request from the House/Senate CJS Appropriations Subcommittee staff, the DOJ WMO has been leading the High-Risk Metropolitan Area Interoperability Assistance Project (“25 Cities”) to provide targeted cities with basic and immediate interagency communications capabilities among local, state, and federal agencies during emergency response. Twenty-five cities were selected using criteria that included perceived risk and population size. As stakeholders in 1 of the 25 cities, Charlotte metropolitan area, local, state, and federal public safety agencies have been working collaboratively with the DOJ WMO to address basic interoperable communications.

#### Participating Agencies

Partnership among Charlotte area local, state, and federal public safety agencies has been instrumental in the development of comprehensive interoperability solution sets. Participating agencies have included—

- Bureau of Alcohol, Tobacco, Firearms, and Explosives
- City of Charlotte
- Drug Enforcement Administration (DEA)
- Federal Bureau of Investigation (FBI)
- Internal Revenue Service
- Mecklenburg County
- North Carolina National Guard
- North Carolina State Highway Patrol
- Transportation Security Administration
- U.S. Customs and Border Protection (CBP)
- U.S. Immigration and Customs Enforcement (ICE)
- U.S. Marshals Service (USMS)
- U.S. Secret Service (USSS)

#### Key Successes

DOJ and area stakeholders successfully achieved basic interoperability and emergency response communications improvements in the Charlotte metropolitan area through the implementation of two interoperability solutions. The solutions supported and upgraded the use of existing, disparate interoperability and communications systems by extending coverage, capacity, and availability to more public safety agencies. Additionally, in the course of meeting this project’s interoperability goals, stakeholders were able to leverage and expand the working relationships among local, state, and federal agencies to resolve interoperability issues for the area.

The first solution provides additional agencies with access to the City of Charlotte-Mecklenburg County (C/M) radio system, a joint radio system supporting over 30 agencies. New caches of C/M portable radios were provided to eight agencies (e.g., CBP, DEA, ICE, USMS, USSS, North Carolina Air National Guard, North Carolina State Highway Patrol, and the City of Charlotte Radio Division) to support on-scene communications with other first responders operating on the C/M radio system. These radio caches increase interoperable communications capabilities among participating local, state, and federal public safety agencies’ command level staff.

The second solution provides additional equipment to increase the variety of radios that can be connected to the FBI’s deployable interoperability switch. This interface equipment better prepares agencies to interoperate with other first responders during emergency situations by providing agencies operating within their own system’s coverage area with a link to radio users of disparate, out-of-band systems. Agency technicians received training from the audio switch manufacturer, JPS Communications, to further their understanding of how to operate the new equipment and its interoperability capabilities.

In support of these solutions, operational assistance was provided through the development of standard operating procedures (SOP) to ensure effective and sustained use of the interoperability solutions. To coordinate common operating procedures for the new interoperability solutions, DOJ worked with the City of Charlotte’s Radio Communications Council to identify additional state and federal participants to join the local agency members. This collaborative effort resulted in the development of SOPs to address rules of use for requesting and deploying the radio caches and for operating the FBI’s deployable interoperability switch. The committee continues to meet to discuss interoperability efforts in the Charlotte metropolitan area.

#### Moving Forward

The cooperation and support between participating agencies and DOJ WMO provided scalable solutions designed to give additional agencies access to the interoperability solutions. Sustained operations, maintenance, and support of these interoperability solutions will be coordinated by key stakeholders. These efforts, along with the area’s long-term interoperability plans, will ensure continuity in addressing interoperable communications among public safety agencies in the Charlotte metropolitan area.

#### Contact Information

If you would like to know more about this initiative and the interoperability solutions, please contact—

##### DOJ Project / C/M Radio Network / SOPs

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##### FBI Deployable Audio Switch

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# Department of Justice High-Risk Metropolitan Area Interoperability Assistance Project *Chicago, Illinois*



## Addressing Interoperability

The Department of Justice (DOJ) Wireless Management Office (WMO) has been working toward improving long-term federal interagency communications across the Nation. As an interim step, and as a response to a request from the House/Senate CJS Appropriations Subcommittee staff, the DOJ WMO has been leading the High-Risk Metropolitan Area Interoperability Assistance Project to provide targeted cities with basic and immediate interagency communications capabilities among local, state, and federal agencies during emergency response. Twenty-five cities were selected by criteria including perceived risk and population size. As stakeholders in 1 of the 25 cities, Chicago metropolitan area local, state, and federal public safety agencies have been working collaboratively with the DOJ WMO to address basic interoperable communications.

## Participating Agencies

Partnership among Chicago area local, state, and federal public safety agencies has been instrumental in the development of comprehensive interoperability solution sets. Participating agencies have included—

- Bureau of Alcohol, Tobacco, Firearms, and Explosives (ATF)
- Chicago Office of Emergency Management and Communications (OEMC)
- Cook County Sheriff Police Department
- Drug Enforcement Administration (DEA)
- DuPage County Office of Emergency Management
- Federal Bureau of Investigation (FBI)
- Illinois State Police
- Midway Airport
- Northwest Central Dispatch
- Red Center Dispatch
- Southwest Central Dispatch
- O'Hare International Airport
- Orland Park Fire Protection Dispatch
- U.S. Coast Guard (USCG)
- U.S. Customs and Border Protection
- U.S. Department of Energy
- U.S. Marshals Service
- U.S. Navy
- U.S. Postal Inspection Service (USPIS)
- U.S. Secret Service (USSS)

## Key Successes

DOJ and area stakeholders successfully achieved basic interoperability and emergency response communications improvements in the Chicago metropolitan area through the implementation of an interoperability solution. The solution, which leverages existing disparate communications systems, provided new wide-area interoperability capabilities. Additionally, in the course of meeting this project's interoperability goals, local, state, and federal stakeholders were able to foster working relationships to resolve interoperability objectives for the area.

DOJ is installing two channels in the summer of 2006, with each channel equipped with a three site multi-cast 125-watt conventional narrowband very high frequency (VHF) repeater and 15 voted receivers strategically located to provide on-street portable coverage in the Chicago metropolitan area. Hosted and maintained by the FBI, the new interoperability channels will enable federal agencies currently operating with VHF digital narrowband-capable subscriber radios to communicate. Although primarily reserved for communications among command and control personnel during emergency responses, the channels can

also be used for routine operations that involve interagency communications. Following operational guidelines, federal agencies, Chicago OEMC, Cook County Sheriff Police Department, DuPage County OEM, Illinois State Police, Midway Airport Communications Center, Northwest Central Dispatch, O'Hare International Airport Communications Center, Orland Central Dispatch, Red Center Dispatch, and Southwest Central Dispatch, can perform console patches of their talk groups or channels to the interoperability channels.

One key attribute of the channel design is that it allows the participating agencies to communicate using their Project 25 compliant VHF radios in the encrypted mode. Initially, secure communications will take place using the DES-OFB algorithm. As more stringent secure communications requirements are adopted, the local, state, and federal agencies will migrate to the Advanced Encryption Standard (AES) algorithm, which has also been included in the channel design.

To allow federal and local agencies to access the existing VHF statewide mutual-aid channels Point-to-Point (PTP) and Illinois Radio Emergency Assistance Channel (IREACH), radio frequency control station consolettes are being implemented in the summer of 2006 at DEA, FBI, USCG, USPIS, USSS, DuPage County OEM, Northwest Central Dispatch, Southwest Central Dispatch, Orland Central Dispatch, and Red Center Dispatch.

To address management issues regarding the new interoperability channels, DOJ worked with local, state, and federal stakeholders. This collaborative effort resulted in the development of operations guidance documents to address rules of use for operating on the interoperability channels. Stakeholders continue to meet to update documentation and discuss interoperability efforts in the Chicago metropolitan area.

## Moving Forward

The cooperation and support between participating agencies and DOJ WMO provided scalable solutions designed to give local and state agencies future access to the interoperability solution. Sustained operations, maintenance, and support of this interoperability solution will be coordinated by key stakeholders. These efforts, along with stakeholder support, will ensure continuity in addressing interoperable communications among public safety agencies in the Chicago metropolitan area.

## Contact Information

If you would like to know more about this initiative and the interoperability solutions, please contact—

### Interoperability Channels

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# Department of Justice

## High-Risk Metropolitan Area Interoperability Assistance Project

### Dallas, Texas

#### Addressing Interoperability

The Department of Justice (DOJ) Wireless Management Office (WMO) is working to improve long-term federal interagency communications across the Nation. As an interim step, and as a response to a request from the House/Senate CJS Appropriations Subcommittee staff, the DOJ WMO has been leading the High-Risk Metropolitan Area Interoperability Assistance Project (“25 Cities”) to provide targeted cities with basic and immediate interagency communications capabilities among local, state, and federal agencies during emergency response. Twenty-five cities were selected using criteria that included perceived risk and population size. As stakeholders in 1 of the 25 cities, Dallas metropolitan area, local, state, and federal public safety agencies have been working collaboratively with the DOJ WMO to address basic interoperable communications.

#### Participating Agencies

Partnership among Dallas area local, state, and federal public safety agencies has been instrumental in the development of comprehensive interoperability solution sets. Participating agencies have included—

- Bureau of Alcohol, Tobacco, Firearms, and Explosives (ATF)
- City of Dallas
- City of Fort Worth
- City of Plano
- Collin County
- Dallas County
- Denton County
- Dallas/Fort Worth Airport
- Drug Enforcement Administration (DEA)
- Federal Bureau of Investigation (FBI)
- Tarrant County
- Texas Department of Public Safety
- U.S. Customs and Border Protection (CBP)
- U.S. Immigration and Customs Enforcement (ICE)
- U.S. Marshals Service
- U.S. Postal Inspection Service
- U.S. Secret Service (USSS)

#### Key Successes

When complete, DOJ and area stakeholders will successfully achieve basic interoperability and emergency response communications improvements in the Dallas metropolitan area through the implementation of three interoperability solutions. The solutions introduce new wide-area interoperability resources and also support the use of existing, disparate communications systems. The new interoperability resources leverage these existing systems to extend coverage, capacity, and availability to more metropolitan area public safety agencies. Additionally, in the course of meeting this project’s interoperability goals, stakeholders were able to foster a working relationship between federal agencies and local and state agencies to resolve interoperability objectives for the area.

The first solution implemented two interoperability channels to support interagency communications during an emergency response. DOJ installed two 350-watt conventional narrowband very high frequency (VHF) repeaters in downtown Fort Worth and two additional repeaters in downtown Dallas. These repeaters, along with eight voted receivers, provide reliable, on-street, portable coverage of the interoperability channels throughout the metropolitan area. Hosted and maintained by the FBI, the new interoperability channels provide a means for wide-area interagency communications where the capability had not existed previously.

To extend connectivity to the new interoperability channels and existing VHF statewide mutual-aid channels, DOJ installed control stations at selected dispatch centers throughout the metropolitan area. Control stations were provided to ATF, CBP, DEA, ICE, USSS, and nine local dispatch centers to link disparate, out-of-band radio systems to the interoperability channels. DOJ also provided mobile radios for agencies accessing the interoperability channels in communications command vehicles. These control stations and mobile radios enable local, state, and federal agencies operating on disparate radio systems to communicate while using their own agency’s radio system.

In addition to the interoperability channels’ infrastructure and connectivity equipment, DOJ procured new audio gateway switch equipment to bridge connections for existing out-of-band, out-of-footprint radio users. DOJ installed a fixed audio gateway switch at the Denton County Sheriff’s Communications Center facility to tie the existing system to disparate radio systems to provide interoperability during emergency operations.

To support communications with disparate systems at an incident site, DOJ provided a transportable audio switch and associated radios to the City of Dallas to interconnect disparate radio systems at an emergency scene.

To coordinate common operating procedures for the new interoperability solutions, DOJ worked with the North Central Texas Council of Governments to identify federal participants to join the local and state agency members of the 16-county region. This collaborative effort will result in the development of operations guidance documents to address rules of use for operating on the interoperability channels. Stakeholders continue to meet to update documentation and discuss interoperability efforts in the Dallas metropolitan area.

#### Moving Forward

The cooperation and support between participating agencies and DOJ WMO provided scalable solutions designed to give additional agencies future access to the interoperability solutions. Sustained operations, maintenance, and support of these interoperability solutions will be coordinated by key stakeholders. These efforts, along with stakeholder support, will ensure continuity in addressing interoperable communications among public safety agencies in the Dallas metropolitan area.

#### Contact Information

If you would like to know more about this initiative and the interoperability solutions, please contact—

##### Interoperability Channels

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##### Denton County Fixed Audio Switch

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# Department of Justice High-Risk Metropolitan Area Interoperability Assistance Project *Denver, Colorado*



## Addressing Interoperability

The Department of Justice (DOJ) Wireless Management Office (WMO) has been working toward improving long-term federal interagency communications across the Nation. As an interim step, and as a response to a request from the House/Senate CJS Appropriations Subcommittee staff, the DOJ WMO has been leading the High-Risk Metropolitan Area Interoperability Assistance Project to provide targeted cities with basic and immediate interagency communications capabilities among local, state, and federal agencies during emergency response. Twenty-five cities were selected by criteria including perceived risk and population size. As stakeholders in 1 of the 25 cities, Denver metropolitan area local, state, and federal public safety agencies have been working collaboratively with the DOJ WMO to address basic interoperable communications.

## Participating Agencies

Partnership among Denver area local, state, and federal public safety agencies has been instrumental in the development of comprehensive interoperability solution sets. Participating agencies have included—

- Arapahoe County
- Arvada City
- Aurora City
- Bureau of Alcohol, Tobacco, Firearms, and Explosives (ATF)
- City of Denver
- Colorado National Guard
- Colorado State Patrol
- Denver County
- Denver International Airport
- Drug Enforcement Administration
- Federal Bureau of Investigation (FBI)
- Lakewood City
- U.S. Customs and Border Protection
- U.S. Immigration and Customs Enforcement
- U.S. Forest Service
- U.S. Marshals Service (USMS)
- U.S. Secret Service
- Westminster City

## Key Successes

DOJ and area stakeholders successfully achieved basic interoperability and emergency response communications improvements in the Denver metropolitan area through the implementation of three interoperability solutions. The solutions support the use of existing, disparate interoperability and communications systems by extending coverage, capacity, and availability to more public safety agencies. Additionally, in the course of meeting this project's interoperability goals, stakeholders were able to foster a working relationship among federal agencies and local and state agencies to resolve interoperability issues for the area.

The first solution provides additional agencies access to the statewide Project-25, Digital Trunked Radio (DTR) network. DTR is composed of partnerships among local, state, and federal agencies. This joint radio system supports public safety agencies using one seamless network. DTR control stations were connected to the radio systems of Arvada/Westminster, Aurora, and Denver International Airport. These control stations give dispatcher and field user access to all DTR radio users. A cache of DTR portable radios was also provided to three federal agencies (ATF, FBI, and USMS) to support on-scene communications with other first responders operating on the DTR system.

The second solution expands the capacity of the Lakewood Police Department's fixed audio switch network by linking one additional audio switch to the two existing switches. This enhancement allows dispatchers to patch together multiple talk groups for agencies to communicate while using their own agency's radio system.

To respond to incident scenes not accessible using existing interoperability resources, a new 4x4 mobile communications vehicle was provided to the Denver Police Department. This vehicle is available for interagency short- and long-term emergency responses. The mobile platform provides agencies operating within



their own system's coverage area with a link to radio users of disparate, out-of-band systems. It can also act as a temporary site to provide communications for radio users outside their own system's coverage area.

In support of these solutions, DOJ worked with the Rocky Mountain Enhanced Digital Access Communications System (EDACS) User Group to identify state and federal participants to join local agency members. This collaborative effort resulted in the development of standard operating procedures to address rules of use for channel patching and mobile resource deployment. The committee continues to meet to discuss interoperability efforts in the Denver metropolitan area.

## Moving Forward

The cooperation and support between participating agencies and DOJ WMO provided short-term scalable solutions designed to give additional agencies future access to the interoperability solutions. Sustained operations, maintenance, and support of these interoperability solutions will be coordinated by key stakeholders. These efforts, along with the City of Denver's long-term interoperability plans to build a shared communications system, will ensure continuity in addressing interoperable communications among public safety agencies in the Denver metropolitan area.

## Contact Information

If you would like to know more about this initiative and the interoperability solutions, please contact—

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# Department of Justice High-Risk Metropolitan Area Interoperability Assistance Project *Detroit, Michigan*



## Addressing Interoperability

The Department of Justice (DOJ) Wireless Management Office (WMO) has been working toward improving long-term federal interagency communications across the Nation. As an interim step, and as a response to a request from the House/Senate CJS Appropriations Subcommittee staff, the DOJ WMO has been leading the High-Risk Metropolitan Area Interoperability Assistance Project to provide targeted cities with basic and immediate interagency communications capabilities among local, state, and federal agencies during emergency response. Twenty-five cities were selected using criteria that included perceived risk and population size. As stakeholders in 1 of the 25 cities, Detroit metropolitan area, local, state, and federal public safety agencies have been working collaboratively with the DOJ WMO to address basic interoperable communications.

## Participating Agencies

Partnership among Detroit area local, state, and federal public safety agencies has been instrumental in the development of comprehensive interoperability solution sets. Participating agencies have included—

- Bureau of Alcohol, Tobacco, Firearms, and Explosives (ATF)
- CSX Police
- Detroit Emergency Medical Services
- Detroit Fire and Police Departments
- Detroit Water and Sewage Department
- Drug Enforcement Administration (DEA)
- Federal Bureau of Investigation (FBI)
- Genesee County
- Macomb County
- Monroe County
- Michigan State Police
- Oakland County
- Royal Canadian Mounted Police (RCMP)
- U.S. Coast Guard (USCG)
- U.S. Customs and Border Protection (CBP)
- U.S. Immigration and Customs Enforcement (ICE)
- U.S. Marshals Service (USMS)
- U.S. Postal Inspection Service (USPIS)
- U.S. Secret Service (USSS)
- Wayne County

## Key Successes

DOJ and area stakeholders successfully achieved basic interoperability and emergency response communications improvements in the Detroit metropolitan area through the implementation of three interoperability solutions. The solutions support the use of existing interoperability resources and disparate communications systems by extending coverage, capacity, and availability to more public safety agencies. Additionally, in the course of meeting this project's interoperability goals, stakeholders were able to expand the working relationships among local, state, and federal agencies to resolve interoperability objectives for the area.

The first solution provides interagency communications by leveraging the Michigan Public Safety Communications System (MPSCS), a regional 800 megahertz (MHz) system, and supports communications among local, state, and federal agencies. This solution was implemented by installing MPSCS consolettes at selected agencies dispatch centers, including ATF, CBP, DEA, FBI, ICE, RCMP, USCG, USMS, USPIS, and USSS. The establishment of emergency interoperability talk groups within the MPSCS will be a component of this solution.

The second solution leverages the existing 800 MHz National Public Safety Planning Advisory Committee (NPSPAC) mutual-aid channels. Two 800 MHz NPSPAC repeaters are being added to the Detroit Water and Sewerage Department system, thereby providing interagency communications between local 800 MHz MPSCS users and 800 MHz users not on the MPSCS.

The third solution outfitted an existing mobile audio switch with additional very high frequency (VHF), ultra high frequency (UHF), and 800 MHz radios. The mobile audio switch is operated and maintained by the FBI and available for deployment in the Detroit metropolitan area. This equipment better prepares agencies to interoperate with other first responders at an incident scene by providing agencies with ad hoc interoperability links and communications coverage.

To address management issues related to the new interoperability equipment, DOJ worked with several stakeholders to develop standard operating procedures (SOP) to outline the use of communications equipment and to ensure proper operation of interoperability resources. Assistance included developing SOPs and an interoperability resource guide regarding proper use of the area's mutual-aid channels and mobile resources.

## Moving Forward

The cooperation and support between participating agencies and DOJ WMO provided scalable solutions designed to give additional agencies access to the interoperability solutions. Sustained operations, maintenance, and support of these interoperability solutions will be coordinated by key stakeholders. These efforts, along with stakeholder support, will ensure continuity in addressing interoperable communications among public safety agencies in the Detroit metropolitan area.

## Contact Information

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# Department of Justice

## High-Risk Metropolitan Area Interoperability Assistance Project

### Hampton Roads/Norfolk, Virginia



#### Addressing Interoperability

The Department of Justice (DOJ) Wireless Management Office (WMO) is working to improve long-term interagency communications across the Nation. As an interim step, and as a response to a request from the House/Senate CJS Appropriations Subcommittee staff, the DOJ WMO has been leading the High-Risk Metropolitan Area Interoperability Assistance Project (“25 Cities”) to provide targeted cities with basic and immediate interagency communications capabilities among local, state, and federal agencies during emergency response. As stakeholders in 1 of the 25 cities, Hampton Roads/Norfolk metropolitan area, local, state, and federal public safety agencies have been working collaboratively with the DOJ WMO to address basic interoperable communications.

#### Participating Agencies

Partnership among Hampton Roads/Norfolk area local, state, and federal public safety agencies has been instrumental in the development of comprehensive interoperability solution sets. DOJ WMO also coordinated with local and state agencies throughout the project and determined that project funding would focus on improving federal, state, and local interoperability by integrating into the local and state solutions funded by recent federal grants. Participating agencies have included—

- Bureau of Alcohol, Tobacco, Firearms, and Explosives
- City of Chesapeake
- City of Hampton
- City of Newport News
- City of Norfolk
- City of Portsmouth
- City of Suffolk
- City of Virginia Beach
- Drug Enforcement Administration
- Federal Bureau of Investigation
- Federal Emergency Management Agency
- National Aeronautics and Space Administration
- U.S. Air Force
- U.S. Army
- U.S. Coast Guard (USCG)
- U.S. Customs and Border Protection
- U.S. Immigration & Customs Enforcement
- U.S. Marshals Service
- U.S. Navy
- U.S. Postal Inspection Service (USPIS)
- U.S. Secret Service
- Virginia Department of Emergency Management
- Virginia State Police
- York/James City/Williamsburg

#### Key Successes

DOJ and area stakeholders successfully achieved basic interoperability and emergency response communications improvements in the Hampton Roads/Norfolk metropolitan area through the implementation of one primary interoperability solution. Additionally, in the course of meeting this project’s interoperability goals, federal stakeholders were able to foster working relationships to resolve interoperability objectives for the area.

An interoperability channel was implemented to support interagency communications during an emergency response. DOJ installed a 350-watt conventional digital narrowband repeater with 10 voted receivers strategically located to provide on-street portable coverage throughout the immediate Hampton Roads/Norfolk metropolitan area. Hosted and maintained by the

FBI, the new very high frequency (VHF) interoperability channel enables federal agencies currently operating with VHF digital narrowband capable subscriber radios to communicate. While primarily reserved for communications among command and control personnel during emergency responses, the channel’s use is encouraged for routine operations that involve interagency communications.

To extend connectivity to the federal interoperability channel, radio control stations were installed to link disparate, out-of-band radio systems to the federal interoperability channel. To enable dispatchers to perform console patches of agencies’ talk groups or channels to the federal interoperability channel, control stations were provided to USPIS, USCG and local U.S. Air Force, U.S. Army, and U.S. Navy bases.

DOJ also purchased 50 radio base station consolettes that will be installed in 8 ACU-1000’s audio switches located in Chesapeake, Hampton, Newport News, Norfolk, Portsmouth, Suffolk, Virginia Beach, and York/James City/Williamsburg communications centers. These centers will be networked together via the Port Security OC3 microwave system.

To address management issues related to the new interoperability equipment, DOJ worked with several stakeholders to develop standard operating procedures (SOP) to outline the use of communications equipment and to ensure proper operation of interoperability resources. Assistance included developing SOPs and an interoperability resource guide. The interoperability resource guide, a tri-fold document containing pertinent channel information, was developed as a quick reference for users operating on the federal interoperability channel.

#### Moving Forward

The cooperation and support between participating agencies and DOJ WMO provided scalable solutions designed to give local, state, and federal agencies access to the interoperability solutions. These efforts, along with stakeholder support, will ensure continuity in addressing interoperable communications among public safety agencies in the Hampton Roads/Norfolk metropolitan area.

#### Contact Information

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# Department of Justice High-Risk Metropolitan Area Interoperability Assistance Project *Honolulu, Hawaii*



## Addressing Interoperability

The Department of Justice (DOJ) Wireless Management Office (WMO) is working to improve long-term federal interagency communications across the Nation. As an interim step, and as a response to a request from the House/Senate CJS Appropriations Subcommittee staff, the DOJ WMO has been leading the High-Risk Metropolitan Area Interoperability Assistance Project (“25 Cities”) to provide targeted cities with basic and immediate interagency communications capabilities among local, state, and federal agencies during emergency response. Twenty-five cities were selected using criteria that included perceived risk and population size. As stakeholders in 1 of the 25 cities, Honolulu metropolitan area, local, state, and federal public safety agencies have been working collaboratively with the DOJ WMO to address basic interoperable communications.

## Participating Agencies

Partnership among Honolulu area local, state, and federal public safety agencies has been instrumental in the development of comprehensive interoperability solution sets. Participating agencies have included—

- Bureau of Alcohol, Tobacco, Firearms, and Explosives (ATF)
- Drug Enforcement Administration (DEA)
- Federal Bureau of Investigation (FBI)
- Hawaii State Civil Defense
- Honolulu Emergency Medical Services
- Honolulu Fire Department
- Honolulu Police Department
- Honolulu Sheriff's Division
- Oahu Civil Defense Agency
- Regional Operations Command and Control Center
- U.S. Coast Guard
- U.S. Customs and Border Protection (CBP)
- U.S. Immigration and Customs Enforcement (ICE)
- U.S. Marshals Service (USMS)
- U.S. Secret Service (USSS)

## Key Successes

DOJ and area stakeholders successfully achieved basic interoperability and emergency response communications improvements in the Honolulu metropolitan area through the implementation of two interoperability solutions. The solutions include a new interoperability network and upgraded mobile resources. Additionally, in the course of meeting this project's interoperability goals, stakeholders were able to leverage and expand the working relationships among local, state, and federal agencies to address interoperability objectives for the area.

For the first solution, DOJ worked with the State of Hawaii to plan and purchase equipment to establish a fixed interoperability network. The first part of this solution is a free space optical (FSO) network between four buildings in downtown Honolulu: Prince Jonah Kuhio Kalaniana'ole (PJKK) Federal Office Building, Leiopapa A Kamehameha State Office Tower, Honolulu Municipal Building, and Honolulu Police Department Alapai Dispatch. The FSO network communications links provide direct communications between radio users and dispatchers through one of the four network nodes.

To manage interagency communications on the fixed interoperability network, an ACU-1000 audio switch was connected to the network to allow dispatchers to patch participating agencies' radio systems

via the FSO network. The FSO network offers participating agencies additional bandwidth for future use of advanced information sharing, such as streaming video and large data transfers.

For those federal agencies without direct connections to the FSO network, a 125 watt VHF conventional narrowband repeater was implemented and connected to the network. An additional 125 watt VHF conventional digital narrowband repeater is being installed in the summer of 2006. Federal agencies that can access the FSO network via the federal interoperability channel include ATF, CBP, DEA (via dual-band mobile radios), FBI, ICE, USMS, and USSS. The Honolulu Fire Department has also authorized the use of one of their VHF island wide frequencies for interoperability use.

An additional interoperability solution provided radios and supporting accessories for implementation into an FBI mobile response vehicle. This additional equipment increases the capabilities of an existing deployable audio switch, better preparing agencies to interoperate with other first responders in remote areas. In spring 2006, DOJ also purchased a 125 watt repeater to be used in this mobile configuration using a federal law enforcement plan frequency.

To coordinate common operating procedures for the new interoperability solutions, DOJ worked with local, state, and federal agencies. This collaborative effort resulted in the development of operational guidance documents to address rules of use for operating on the fixed interoperability network and deploying mobile resources. Stakeholders continue to meet to discuss operational use of interoperability solutions in the Honolulu metropolitan area.

## Moving Forward

The cooperation and support between participating agencies and DOJ WMO provided scalable solutions designed to give additional agencies future access to the interoperability solutions. Sustained operations, maintenance, and support of these interoperability solutions will be coordinated by key stakeholders. These efforts, along with plans to add advanced information sharing capabilities (e.g., data and video transfer) to the FSO network, will ensure continued improvements to interoperable communications and information sharing among public safety agencies in the Honolulu metropolitan area.

## Contact Information

If you would like to know more about this initiative and the interoperability solutions, please contact—

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# Department of Justice

## High-Risk Metropolitan Area Interoperability Assistance Project

### *Houston, Texas*



### Addressing Interoperability

The Department of Justice (DOJ) Wireless Management Office (WMO) is working to improve long-term federal interagency communications across the Nation. As an interim step, and as a response to a request from the House/Senate CJS Appropriations Subcommittee staff, the DOJ WMO has been leading the High-Risk Metropolitan Area Interoperability Assistance Project (“25 Cities”) to provide targeted cities with basic and immediate interagency communications capabilities among local, state, and federal agencies during emergency response. Twenty-five cities were selected using criteria that included perceived risk and population size. As stakeholders in 1 of the 25 cities, Houston metropolitan area, local, state, and federal public safety agencies have been working collaboratively with the DOJ WMO to address basic interoperable communications.

### Participating Agencies

Partnership among Houston area local, state, and federal public safety agencies has been instrumental in the development of comprehensive interoperability solution sets. Participating agencies have included—

- Bureau of Alcohol, Tobacco, Firearms, and Explosives (ATF)
- City of Houston
- Drug Enforcement Administration (DEA)
- Federal Bureau of Investigation (FBI)
- Harris County
- Houston Airport Authority
- Port of Houston Authority
- Texas Department of Public Safety (DPS)
- U.S. Coast Guard
- U.S. Customs and Border Protection (CBP)
- U.S. Immigration and Customs Enforcement (ICE)
- U.S. Marshals Service
- U.S. Secret Service (USSS)

### Key Successes

DOJ and area stakeholders will successfully achieve basic interoperability and emergency response communications improvements in the Houston metropolitan area through the implementation of one primary interoperability solution. The solution introduces new wide-area interoperability resources and also supports the use of existing, disparate communications systems. The new interoperability resources leverage these existing systems to extend coverage, capacity, and availability to more metropolitan area public safety agencies. Additionally, in the course of meeting this project’s interoperability goals, stakeholders were able to foster a working relationship between federal agencies and local and state agencies to resolve interoperability objectives for the area.

Two interoperability channels were implemented to support interagency communications during an emergency response. DOJ installed two 350-watt conventional narrowband very high frequency (VHF) repeaters in downtown Houston. These repeaters, along with four voted receivers, provide reliable, on-street, portable coverage of the interoperability channels throughout the metropolitan area. Hosted and maintained by the FBI, the new interoperability channels provide a means for wide-area interagency communications where the capability did not exist previously.

To extend connectivity to the new interoperability channels and existing VHF statewide mutual-aid channels, DOJ installed control stations at selected dispatch centers throughout the metropolitan area. Control stations were provided to ATF, DEA, Harris County Sheriff’s Office, Texas DPS, ICE, Port of Houston Authority, and USSS to link disparate or out-of-band radio systems to the interoperability channels. DOJ also provided direct console connectivity between the City of Houston and the FBI to enable the City patching capabilities of the interoperability channels. These control stations and console connectivity enable local, state, and federal agencies operating on disparate radio systems to communicate while using their own agency’s radio system.

To coordinate common operating procedures for the new interoperability solution, DOJ is working with local, state, and federal agencies. This collaborative effort will result in the development of a draft operations guidance document to address rules of use for operating on the interoperability channels. Stakeholders will continue to meet to review procedures and to discuss interoperability efforts in the Houston metropolitan area.

### Moving Forward

The cooperation and support between participating agencies and DOJ WMO provided scalable solutions designed to give additional agencies future access to the interoperability solutions. Sustained operations, maintenance, and support of these interoperability solutions will be coordinated by key stakeholders. These efforts, along with the City of Houston’s short-term interoperability plans to link disparate networks and interoperate on existing systems, and the regional area’s long-term plans for migration to a regional system, will ensure continuity in addressing interoperable communications among public safety agencies in the Houston metropolitan area.

### Contact Information

If you would like to know more about this initiative and the interoperability solutions, please contact—

#### Interoperability Channels

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# Department of Justice High-Risk Metropolitan Area Interoperability Assistance Project *Jacksonville, Florida*



## Addressing Interoperability

The Department of Justice (DOJ) Wireless Management Office (WMO) is working to improve long-term federal interagency communications across the Nation. As an interim step, and as a response to a request from the House/Senate CJS Appropriations Subcommittee staff, the DOJ WMO has been leading the High-Risk Metropolitan Area Interoperability Assistance Project (“25 Cities”) to provide targeted cities with basic and immediate interagency communications capabilities among local, state, and federal agencies during emergency response. Twenty-five cities were selected using criteria that included perceived risk and population size. As stakeholders in 1 of the 25 cities, Jacksonville metropolitan area, local, state, and federal public safety agencies have been working collaboratively with the DOJ WMO to address basic interoperable communications.

## Participating Agencies

Partnership among Jacksonville area local, state, and federal public safety agencies has been instrumental in the development of comprehensive interoperability solution sets. Participating agencies have included—

- Baker County
- Bureau of Alcohol, Tobacco, Firearms, and Explosives
- City of Jacksonville
- Clay County
- Department of Business and Regulation
- Department of Environment Protection
- Department of Fish and Wildlife Conservation
- Department of Transportation
- Division of State Fire Marshals
- Drug Enforcement Administration
- Duval County
- Federal Bureau of Investigation (FBI)
- Florida Department of Law Enforcement
- Florida Highway Patrol
- Jacksonville Sheriff’s Office (JSO)
- Nassau County
- Naval Air Stations (NAS)—Jacksonville and Mayport
- St. Johns County
- Transportation Security Administration
- U.S. Coast Guard
- U.S. Customs and Border Protection
- U.S. Immigration and Customs Enforcement
- U.S. Marshals Service
- U.S. Secret Service

## Key Successes

DOJ and area stakeholders successfully achieved basic interoperability and emergency response communications improvements in the Jacksonville metropolitan area through the implementation of four interoperability solutions. The solutions introduce a new wide-area interoperability resource and also support the use of existing, disparate interoperability and communications systems by extending coverage, capacity, and availability to more public safety agencies. Additionally, in the course of meeting this project’s interoperability goals, stakeholders were able to foster a working relationship among local, state, and federal agencies to address interoperability objectives for the area.

DOJ installed a 350-watt conventional narrowband very high frequency (VHF) transmitter, which also acts as a voted receiver, and six voted receive sites strategically located to provide reliable mobile coverage throughout the Jacksonville area. Hosted and maintained by the FBI, the new interoperability channel also enables local, state, and federal agencies operating on disparate radio systems to communicate while using their own agency’s radio

system. The channel is primarily intended for communications among command and control personnel during emergency responses.

Existing agencies with VHF narrowband-capable radios can directly access the federal interoperability channel. To extend connectivity to Jacksonville NAS and Mayport NAS, DOJ provided radio frequency consolettes to link their disparate radio systems to the interoperability channel.

To provide interoperable communications capabilities between federal agencies and local and state agencies, DOJ provided a VHF consolette to interface with the Florida Interoperability Network (FIN) installed at the JSO dispatch center. This solution provides interoperability capabilities between the FIN and the federal interoperability channel. Once fully implemented, the FIN will interconnect nearly all local and state agency dispatch centers throughout Florida and provide voice-communications interoperability among solution participants.

As a backup resource, DOJ installed a JPS ACU-1000 at the JSO dispatch center to interconnect users of disparate systems within the metropolitan region. DOJ also provided a VHF consolette to the JSO for this solution to allow interconnection of audio switch users with the VHF P25 federal interoperability channel.

To support on-scene interoperability, DOJ provided five JPS ACU-T’s transportable audio switches to area agencies. Specifically, one audio switch was provided to the Sheriff’s Office located in each of the following counties: Baker, Clay, Duval (City of Jacksonville), Nassau, and St. Johns. Agency technicians received training from the audio switch manufacturer, JPS Communications, to effectively operate the new equipment and interoperability capabilities.

To address management of the new interoperability equipment, DOJ worked with local, state, and federal agencies to develop standard operating procedures (SOP) to outline the use of communications equipment and to ensure proper operation of interoperability resources.

## Moving Forward

The cooperation and support between participating agencies and DOJ WMO provided scalable solutions designed to give additional agencies future access to the interoperability solutions. Sustained operations, maintenance, and support of these interoperability solutions will be coordinated by key stakeholders. These efforts, along with stakeholder support, will ensure continuity in addressing interoperable communications among public safety agencies in the Jacksonville metropolitan area.

## Contact Information

If you would like to know more about this initiative and the interoperability solutions, please contact—

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# Department of Justice High-Risk Metropolitan Area Interoperability Assistance Project *Los Angeles, California*



## Addressing Interoperability

The Department of Justice (DOJ) Wireless Management Office (WMO) is working to improve long-term federal interagency communications across the Nation. As an interim step, and as a response to a request from the House/Senate CJS Appropriations Subcommittee staff, the DOJ WMO has been leading the High-Risk Metropolitan Area Interoperability Assistance Project (“25 Cities”) to provide targeted cities with basic and immediate interagency communications capabilities among local, state, and federal agencies during emergency response. Twenty-five cities were selected using criteria that included perceived risk and population size. As stakeholders in 1 of the 25 cities, Los Angeles metropolitan area, local, state, and federal public safety agencies have been working collaboratively with the DOJ WMO to address basic interoperable communications.

## Participating Agencies

Partnership among Los Angeles area local, state, and federal public safety agencies has been instrumental in the development of comprehensive interoperability solution sets. Participating agencies involved in the existing regional system included—

- Alhambra Police Department (PD)
- Arcadia PD
- Azusa PD
- Baldwin Park PD
- Beverly Hills Fire Department (FD)
- Burbank PD
- California Highway Patrol
- California National Guard
- Covina PD
- Drug Enforcement Administration
- El Monte PD
- Federal Bureau of Investigation
- Glendale FD
- Glendora PD
- Imperial County Communications Center (CC)
- Irwindale PD
- Kern County CC
- La Verne PD
- Long Beach PD
- Los Angeles City FD
- Los Angeles County FD
- Los Angeles County Sheriff's Department
- Monrovia PD
- Montebello PD
- Monterey Park PD
- Orange County CC
- Pasadena PD
- Pomona County CC
- Porona PD
- Redondo Beach FD and PD
- Riverside County CC
- San Bernardino CC
- San Diego County CC
- San Fernando PD
- San Gabriel FD and PD
- San Marino FD and PD
- Santa Barbara CC
- Santa Fe Springs FD
- Santa Monica FD
- Sierra Madre PD
- Signal Hill PD
- South Pasadena FD and PD
- Torrance PD
- U.S. Customs and Border Protection
- U.S. Navy/Marines
- U.S. Postal Inspection Service
- U.S. Secret Service
- Ventura County CC
- Vernon FD and PD
- West Covina PD

## Key Successes

DOJ and area stakeholders successfully achieved basic interoperability and emergency response communications improvements in the Los Angeles metropolitan area through the implementation of two interoperability solutions. The solutions support and upgrade the use of an existing regional system by expanding capacity and availability to more public safety agencies. Additionally, in the course of meeting this project's

interoperability goals, stakeholders were able to leverage and expand the working relationships among local, state, and federal agencies to resolve interoperability issues for the area.

The first solution leverages the existing Los Angeles Regional Tactical Communications System (LARTCS) fixed infrastructure, which supports interoperable communications among participating local, state, and federal public safety agencies. The interagency communications are achieved via two audio gateway switches located at the Los Angeles County Sheriff's Department's Communications Center. The first switch added to the LARTCS supports interoperability among local, state, and federal public safety agencies from Santa Barbara County to the U.S.–Mexico border. The second switch supports five additional interoperability channels. Effectively, these additional channels increase the capacity of the LARTCS to support mutual-aid channels used during emergency responses. In the summer of 2006, two additional VHF repeaters are to be installed using federal frequencies.

The second solution provides the Los Angeles County Sheriff's Department with two mobile audio switches to support on-scene interagency interoperability for ad hoc incident responses outside the area supported by LARTCS' fixed interoperability infrastructure.

## Moving Forward

The cooperation and support between participating agencies and DOJ WMO provided scalable solutions designed to give additional agencies access to the interoperability solutions. Sustained operations, maintenance, and support of these interoperability solutions will be coordinated by key stakeholders. These efforts, along with the area's long-term interoperability plans, will ensure continuity in addressing interoperable communications among public safety agencies in the Los Angeles metropolitan area.

## Contact Information

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### LARTCS

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# Department of Justice High-Risk Metropolitan Area Interoperability Assistance Project *Miami, Florida*



## Addressing Interoperability

The Department of Justice (DOJ) Wireless Management Office (WMO) is working to improve long-term federal interagency communications across the Nation. As an interim step, and as a response to a request from the House/Senate CJS Appropriations Subcommittee staff, the DOJ WMO has been leading the High-Risk Metropolitan Area Interoperability Assistance Project (“25 Cities”) to provide targeted cities with basic and immediate interagency communications capabilities among local, state, and federal agencies during emergency response. Twenty-five cities were selected using criteria that included perceived risk and population size. As stakeholders in 1 of the 25 cities, Miami metropolitan area, local, state, and federal public safety agencies have been working collaboratively with the DOJ WMO to address basic interoperable communications.

## Participating Agencies

Partnership among Miami area local, state, and federal public safety agencies has been instrumental in the development of comprehensive interoperability solution sets. Participating agencies have included—

- Bureau of Alcohol, Tobacco, Firearms, and Explosives (ATF)
- City of Miami
- Department of Corrections
- Department of Fish and Wildlife Conservation
- Division of State Fire Marshals
- Drug Enforcement Administration (DEA)
- Federal Bureau of Investigation (FBI)
- Florida Department of Law Enforcement
- Florida Department of Transportation
- Florida Highway Patrol
- Internal Revenue Service
- Miami International Airport
- Miami-Dade County
- National Park Service (NPS)
- Port of Miami
- U.S. Coast Guard (USCG)
- U.S. Customs and Border Protection
- U.S. Immigration and Customs Enforcement
- U.S. Marshals Service
- U.S. Secret Service (USSS)

## Key Successes

DOJ and area stakeholders successfully achieved basic interoperability and emergency response communications improvements in the Miami metropolitan area through the implementation of four interoperability solutions. These solutions support and upgrade the use of existing, disparate communications systems and interoperability resources by extending capacity and availability to more public safety agencies. Additionally, in the course of meeting this project’s interoperability goals, stakeholders were able to expand the working relationships among local, state, and federal agencies to resolve interoperability objectives for the area.

The first solution provided equipment to directly connect ATF, DEA, FBI, NPS, USCG, and USSS to the Miami-Dade County radio system. Two control stations were connected to each agency’s operating console to provide direct access to a locally used 800 megahertz (MHz) mutual-aid channel and the Miami-Dade County radio system. The mutual-aid channel acts as a hailing channel for participating federal agencies to contact the Miami-Dade dispatch center to request a console patch to agencies on the Miami-Dade County radio system.

The second solution provided control stations to connect DEA, FBI, and USSS to the City of Miami radio system. These additional control stations provide direct access to the City of Miami system without tying up Miami-Dade County radio system talk groups or resources.

The third solution provided equipment upgrades to ensure that the mobile audio switches in the Miami metropolitan area are capable of supporting interoperable communications with various radio systems. The upgrades included switch software, cables to connect radios to the switch, and laptop computers to control the switch. These upgrades ensure that all of the area’s mobile audio switches are ready for emergency use.

The fourth solution is a 350 watt Federal Interoperability VHF Repeater with 14 receiver sites affording on-street and mobile coverage in Dade and Broward counties. Agencies with P25 VHF radios will be able to access this channel, which can also be patched into the Miami-Dade and City of Miami 800 MHz radio systems. This repeater system is scheduled for installation in summer-fall, 2006.

In support of these solutions, operational assistance was provided through the development of standard operating procedures (SOP) to ensure effective and sustained use of the interoperability solutions. To coordinate common operating procedures for the new interoperability solutions, DOJ worked with the South Florida Interoperability Working Group, in addition to local, state, and federal agencies in the Miami metropolitan area. Additionally, training and communications exercise plans were provided so that agencies would better understand and subsequently address technical and operational deficiencies that may exist.

## Moving Forward

The cooperation and support between participating agencies and DOJ WMO provided scalable solutions designed to give additional agencies access to the interoperability solutions. Sustained operations, maintenance, and support of these interoperability solutions will be coordinated by key stakeholders. These efforts, along with the area’s long-term interoperability plans, will ensure continuity in addressing interoperable communications among public safety agencies in the Miami metropolitan area.

## Contact Information

If you would like to know more about this initiative and the interoperability solutions, please contact—

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# Department of Justice

## High-Risk Metropolitan Area Interoperability Assistance Project

### New Orleans, Louisiana

#### Addressing Interoperability

The Department of Justice (DOJ) Wireless Management Office (WMO) is working to improve long-term federal interagency communications across the Nation. As an interim step, and as a response to a request from the House/Senate CJS Appropriations Subcommittee staff, the DOJ WMO has been leading the High-Risk Metropolitan Area Interoperability Assistance Project (“25 Cities”) to provide targeted cities with basic and immediate interagency communications capabilities among local, state, and federal agencies during emergency response. Twenty-five cities were selected using criteria that included perceived risk and population size. As stakeholders in 1 of the 25 cities, New Orleans metropolitan area, local, state, and federal public safety agencies have been working collaboratively with the DOJ WMO to address basic interoperable communications.

#### Partnering Agencies

Partnership among New Orleans area local, state, and federal public safety agencies has been instrumental in the development of comprehensive interoperability solution sets. Participating agencies have included—

- Bureau of Alcohol, Tobacco, Firearms, and Explosives
- Causeway Police
- City of New Orleans
- Civil Air Patrol
- Crescent City Connection Police Department
- Drug Enforcement Administration
- Federal Bureau of Investigation (FBI)
- Jefferson Parish
- Louisiana Department of Public Safety
- Louisiana National Guard
- New Orleans Fire Department (NOFD)
- New Orleans International Airport Fire Department
- Port of New Orleans Harbor Police
- St. Bernard Parish
- U.S. Coast Guard
- U.S. Customs and Border Protection
- U.S. Immigration and Customs Enforcement
- U.S. Marshals Service
- U.S. Secret Service

#### Key Successes

DOJ and area stakeholders successfully achieved basic interoperability and emergency response communications improvements in the New Orleans metropolitan area through the implementation of four interoperability solutions. The solutions introduce a new wide-area interoperability resource and also support the use of existing, disparate interoperability and communications systems by extending coverage, capacity, and availability to more public safety agencies. Additionally, in the course of meeting this project’s interoperability goals, stakeholders were able to foster a working relationship among local, state, and federal agencies to resolve interoperability objectives for the area.

The first solution implemented a federal interoperability channel to support interagency communications during emergency response. DOJ installed a 350-watt conventional narrowband repeater in April, 2006, with 13 voted receivers strategically located to provide on-street and mobile coverage throughout the New Orleans metropolitan area. Hosted and maintained by the FBI, the new very high frequency (VHF) interoperability channel provides for wide-area interagency communications. While the priority use is

for communications among command and control personnel during emergency responses, the channel will also be used for daily operations that involve interagency communications.

To expand existing interconnection capabilities and to extend connectivity to the new federal interoperability channel, two audio switches were installed at the New Orleans Fire Department (NOFD) Rosedale Communications Center (RCC) to complement two existing audio switches. The ACU-1000’s were outfitted with VHF, ultra high frequency (UHF), and 800 megahertz (MHz) control stations to link disparate, out-of-band radio systems and the federal interoperability channel. Audio switch operators can patch the federal interoperability channel to local, state, and federal radio systems, thereby providing region-wide interoperability among those agencies during emergency response. Two new microwave links were installed in July, 2006, from RCC to USCG New Orleans and RCC to Orleans Parish Communications District to provide consistent connectivity. Five new 700/800 radios are scheduled to be installed at the RCC in August, 2006, to provide connectivity to the Region 1 radio system.

To support interoperable communications at an incident scene, the third solution is to provide a mobile audio switch that will be installed in a New Orleans Maritime Interoperability Committee (NOMIC) agency supplied vehicle. This solution and other mobile solutions are currently under study by NOMIC, and will be implemented in the fall of 2006.

DOJ purchased eighteen radios for the City of New Orleans to be connected to their new Network First switch that is being installed in summer, 2006. DOJ also purchased a new control station for USCG New Orleans to provide an additional link into the federal interoperability channel and the NOMIC ACU-1000 and Network First switches.

To coordinate common operating procedures for the new interoperability solutions, DOJ worked with NOMIC to identify federal participants to join the local and state agency members. This collaborative effort resulted in the development of standard operating procedures to address rules of use for operating on the federal interoperability channel, requesting a patch on the fixed audio switches, and deploying mobile resources. Stakeholders continue to meet regularly to update documentation and to discuss interoperability efforts in the New Orleans metropolitan area.

#### Contact Information

Additional information can be provided by the following —

##### Federal Interoperability Channel

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# Department of Justice High-Risk Metropolitan Area Interoperability Assistance Project *New York City, New York*



## Addressing Interoperability Gaps

The Department of Justice (DOJ) Wireless Management Office (WMO) worked with New York City (NYC) metropolitan area local, state, and federal public safety agencies to identify communications gaps and solutions to resolve them as a part of the High-Risk Metropolitan Area Interoperability Assistance Project. To accomplish the project, DOJ began working with the City of New York Interagency Communications Committee to identify federal participants to join the local and state agency members. Following the addition of several new participating agencies, the group formed a DOJ interoperability committee.

## Solution Development

The interoperability committee determined that area agencies did not have a common interoperability channel to communicate on during an incident response. Therefore, the committee chose to leverage existing resources and to build out new capabilities to provide interoperability in and around the NYC metropolitan area.

The interoperability committee is now supporting implementation and use of the new solutions. This committee has been developing new operating procedures to ensure efficient usage of the new interoperability capabilities.

## Participating Agencies

The agencies with improved interoperability as a result of the DOJ initiative in the NYC metropolitan area are—

- Bureau of Alcohol, Tobacco, Firearms, and Explosives
- Department of Information Technology and Telecommunications
- Drug Enforcement Administration (DEA)
- Federal Bureau of Investigation
- Federal Emergency Management Agency
- Federal Protective Service
- Metropolitan Transportation Authority Police Department
- Nassau County Police Department
- NYC Department of Corrections
- NYC Fire Department
- NYC Police Department (NYPD)
- NYC Office of Emergency Management
- New York State Park Police
- New York State Police
- Port Authority of New York and New Jersey
- Suffolk County Police
- U.S. Coast Guard
- U.S. Customs and Border Protection
- U.S. Immigration and Customs Enforcement
- U.S. Marshals Service
- U.S. Park Police
- U.S. Postal Inspection Service (USPIS)
- U.S. Secret Service
- Westchester County Public Safety

## Solution Description

Participating New York public safety agencies chose to procure new equipment, as well as leverage their existing interoperability resources, by identifying a five-part interoperability solution set to improve wide-area interoperable communications.

The first solution provided a single site 350 watt VHF repeater with 14 voted receiver sites to enhance wide-area federal interagency communications. This federal interoperability channel can be wirelessly linked, via control stations, to the NYPD Dispatch Center, USPIS, and DEA.

The second solution leveraged 11 existing TRP-1000 units owned by partner agencies in the NYC metropolitan area. The interoperability committee identified the units as the primary mechanism for improving interagency communications at the scene of major emergencies. DOJ purchased additional radios, cables, and other accessories to fully integrate these units into the partner agencies' emergency communications processes.

The third solution provided 56 radio base stations to support operation on a Westchester County interoperability radio channel. This interoperability channel leverages an existing frequency pair and a new countywide repeater system, and is designated for interagency communications.

The fourth solution provided assistance in developing standard operating procedures for requesting and deploying the mobile TRP-1000's at incident scenes.

The fifth solution provided a new TRP-1000 audio switch equipped with 9 mobile radios on various bands to the Nassau County Police Department. This switch is installed in a mobile vehicle for deployment throughout the area.

## Exercises

Communications exercises provide an opportunity for users to gain experience with new equipment in a controlled environment. In July 2004, 14 local, state, and federal agencies participated in a series of three communications exercises to test the new equipment and interoperability capabilities. The goals of the communications exercises were to increase awareness of the deployable audio switches, evaluate trained personnel, and demonstrate the procedural complexities of using the interoperability solutions.



## Contact Information

If you would like to know more about this initiative or have questions, please contact—

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# Department of Justice High-Risk Metropolitan Area Interoperability Assistance Project *Philadelphia, Pennsylvania*



## Addressing Interoperability

The Department of Justice (DOJ) Wireless Management Office (WMO) is working to improve long-term federal interagency communications across the Nation. As an interim step, and as a response to a request from the House/Senate CJS Appropriations Subcommittee staff, the DOJ WMO has been leading the High-Risk Metropolitan Area Interoperability Assistance Project (“25 Cities”) to provide targeted cities with basic and immediate interagency communications capabilities among local, state, and federal agencies during emergency response. Twenty-five cities were selected using criteria that included perceived risk and population size. As stakeholders in 1 of the 25 cities, Philadelphia metropolitan area, local, state, and federal public safety agencies have been working collaboratively with the DOJ WMO to address basic interoperable communications.

## Participating Agencies

Partnership among Philadelphia area local, state, and federal public safety agencies has been instrumental in the development of comprehensive interoperability solution sets. Participating agencies have included—

- Bureau of Alcohol, Tobacco, Firearms, and Explosives
- Bucks County
- Burlington County
- Camden County
- Chester County
- Cumberland County
- Delaware County
- Drug Enforcement Administration (DEA)
- Federal Bureau of Investigation (FBI)
- Federal Emergency Management Agency (FEMA)
- Federal Protective Service (FPS)
- Gloucester County
- Montgomery County
- National Park Service (NPS)
- Philadelphia County
- Philadelphia Fire Department
- Philadelphia Police Department
- Philadelphia Department of Public Property (PDPP)
- Philadelphia Office of Emergency Management
- Pennsylvania Office of Attorney General
- Pennsylvania Emergency Management Agency
- Pennsylvania State Police (PSP)
- Salem County
- Southeastern Counterterrorism Task Force
- Southeastern Pennsylvania Transportation Authority (SEPTA)
- U.S. Coast Guard
- U.S. Customs and Border Protection
- U.S. Immigration and Customs Enforcement (ICE)
- U.S. Marshals Service (USMS)
- U.S. Mint
- U.S. Secret Service

## Key Successes

DOJ and area stakeholders successfully achieved basic interoperability and emergency response communications improvements in the Philadelphia metropolitan area through the implementation of two interoperability solutions. The solutions introduced a new wide-area interoperability resource and improved the use of existing, disparate, interoperability and communications systems by extending coverage, capacity, and availability to more public safety agencies. Additionally, in the course of meeting this project’s interoperability goals, stakeholders were able to foster a working relationship among local, state, and federal agencies to resolve interoperability objectives for the area.

An interoperability channel was implemented to support interagency communications during an emergency response. DOJ installed a 350 watt very high frequency (VHF) conventional digital narrowband

transmitter, which also acts as a voted receiver, and eight voted receive sites strategically located to provide reliable on-street portable coverage throughout the Philadelphia metropolitan area. Hosted and maintained by the FBI, the new interoperability channel also enables local, state, and federal agencies operating on disparate radio systems to communicate while using their own agency’s radio system. This channel is primarily reserved for communications among command and control personnel during emergency responses.

To extend connectivity to the interoperability channel, radio frequency consolets were implemented at FEMA, FPS, Philadelphia OEM, SEPTA and U.S. Mint locations. DOJ also provided a wireline circuit to connect the DEA dispatch console to the FBI’s dispatch console. To extend coverage underground, DOJ provided a VHF consolette to SEPTA for integration with its RIOS fixed audio switch. The SEPTA fixed audio switch networks together several public safety radio systems in the Philadelphia metropolitan area and can connect the federal interoperability channel to any of these radio systems, including the SEPTA radio system. Agencies operating in the VHF band can communicate directly on the federal interoperability channel or request a patch via the SEPTA interoperability audio switch.

The second interoperability solution supported equipment upgrades to three existing audio switches owned and operated by the FBI, PDPP, and PSP. Upgrades included the purchasing of new software, patch cables, and mobile and portable radios. These upgrades ensure that area audio switches are ready for emergency deployment and interoperability with disparate communications systems in the Philadelphia metropolitan area. Agency technicians received training from the audio switch manufacturer, JPS Communications, to effectively operate the new equipment.

In order to address the management of the new interoperability equipment, DOJ worked with local, state, and federal agencies to develop standard operating procedures (SOP’s). These SOP’s outlined the use of the communications equipment to assist in the proper operation of these interoperability resources.

## Moving Forward

The cooperation and support between participating agencies and DOJ WMO provided scalable solutions designed to give additional agencies future access to the interoperability solutions. Sustained operations, maintenance, and support of these interoperability solutions will be coordinated by key stakeholders. These efforts, along with stakeholder support, will ensure continuity in addressing interoperable communications among public safety agencies in the Philadelphia metropolitan area.

## Contact Information

If you would like to know more about this initiative and the interoperability solutions, please contact—

### Interoperability Channel / Mobile Audio Switches

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# Department of Justice High-Risk Metropolitan Area Interoperability Assistance Project *Phoenix, Arizona*



## Addressing Interoperability

The Department of Justice (DOJ) Wireless Management Office (WMO) is working to improve long-term federal interagency communications across the Nation. As an interim step, and as a response to a request from the House/Senate CJS Appropriations Subcommittee staff, the DOJ WMO has been leading the High-Risk Metropolitan Area Interoperability Assistance Project (“25 Cities”) to provide targeted cities with basic and immediate interagency communications capabilities among local, state, and federal agencies during emergency response. Twenty-five cities were selected using criteria that included perceived risk and population size. As stakeholders in 1 of the 25 cities, Phoenix metropolitan area, local, state, and federal public safety agencies have been working collaboratively with the DOJ WMO to address basic interoperable communications.

## Participating Agencies

Partnership among Phoenix area local, state, and federal public safety agencies has been instrumental in the development of comprehensive interoperability solution sets. Participating agencies have included—

- Apache Junction Police Department (PD)
- Arizona Department of Public Safety
- Arizona State University PD
- Avondale PD
- Bureau of Alcohol, Tobacco, Firearms, and Explosives
- Chandler PD
- Drug Enforcement Administration
- El Mirage PD
- Federal Bureau of Investigation
- Gila River Indian Community
- Glendale PD
- Goodyear PD
- Maricopa County Sheriff’s Office
- Mesa Fire Department
- Paradise Valley PD
- Peoria PD
- Scottsdale PD
- Surprise PD
- Tempe PD
- Tolleson PD
- U.S. Customs and Border Protection
- U.S. Forest Service
- U.S. Immigration and Customs Enforcement
- U.S. Marshals Service
- U.S. Secret Service

## Key Successes

DOJ and area stakeholders successfully achieved basic interoperability and emergency response communications improvements in the Phoenix metropolitan area through the implementation of three interoperability solutions. The solutions support and upgrade the use of existing, disparate interoperability and communications systems by extending coverage, capacity, and availability to more public safety agencies, as well as providing new interoperability resources to the public safety community. Additionally, in the course of meeting this project’s interoperability goals, stakeholders were able to expand the working relationships among local, state, and federal agencies to resolve interoperability objectives for the area.

The first solution upgraded and added equipment to the existing Arizona Inter-Agency Radio System (IARS) very high frequency (VHF) and ultra high frequency (UHF) mutual-aid channels to improve the utility of the channels for public safety agencies. Equipment was upgraded at four tower sites to resolve interference and reliability issues associated with the previous configuration of the mutual-aid channels.

The second solution involved installation of 800 megahertz (MHz) Phoenix Regional Wireless Network (PRWN)/Mesa Trunked Open Arizona Network (TOPAZ) control stations at 16 area communications centers. The control stations provide direct communications for increased coordination between agencies on disparate radio systems and agencies on the PRWN/TOPAZ radio systems.

The third solution provides three 800 MHz radio caches of 15 radios each and is available for deployment and use by participating agencies. The radio caches provide ad hoc interoperable communications between agencies and are programmed with talk groups from multiple area radio systems, including PRWN/TOPAZ, Maricopa County, and Glendale. The three agencies designated to own, maintain, and deploy each radio cache are Glendale Police Department (Western Valley), Mesa Fire Department (Eastern Valley), and the Maricopa County Sheriff’s Office (Central Valley).

In support of these solutions, operational assistance was provided through the development of operational guidance documents to ensure effective and sustained use of the interoperability solutions. To coordinate common operating procedures for the new interoperability solutions, DOJ worked with local, state, and federal agencies. This collaborative effort resulted in the development of operational guidance documents to address rules of use for IARS mutual-aid channels and PRWN/TOPAZ control station talk groups. In addition, a field resource guide was developed to coordinate the deployment of the radio caches and existing mobile audio switches. Under the aegis of the Arizona Public Safety Communications Committee, the stakeholders continue to meet to update these documents and discuss interoperability efforts in the Phoenix metropolitan area.

## Moving Forward

The cooperation and support between participating agencies and DOJ WMO provided scalable solutions designed to give additional agencies access to the interoperability solutions. Sustained operations, maintenance, and support of these interoperability solutions will be coordinated by key stakeholders. These efforts, along with the area’s long-term interoperability plans, will ensure continuity in addressing interoperable communications among public safety agencies in the Phoenix metropolitan area.

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# Department of Justice High-Risk Metropolitan Area Interoperability Assistance Project *Portland, Oregon*



## Addressing Interoperability

The Department of Justice (DOJ) Wireless Management Office (WMO) has been working toward improving long-term federal interagency communications across the Nation. As an interim step, and as a response to a request from the House/Senate CJS Appropriations Subcommittee staff, the DOJ WMO has been leading the High-Risk Metropolitan Area Interoperability Assistance Project to provide targeted cities with basic and immediate interagency communications capabilities among local, state, and federal agencies during emergency response. Twenty-five cities were selected using criteria that included perceived risk and population size. As stakeholders in 1 of the 25 cities, Portland metropolitan area, local, state, and federal public safety agencies have been working collaboratively with the DOJ WMO to address basic interoperable communications.

## Participating Agencies

Partnership among Portland area local, state, and federal public safety agencies has been instrumental in the development of a comprehensive interoperability solution set. Participating agencies have included—

- Bureau of Alcohol, Tobacco, Firearms, and Explosives (ATF)
- City of Portland
- Clackamas County
- Clark Regional Emergency Services Agency (Washington State)
- Columbia County
- Drug Enforcement Administration (DEA)
- Federal Bureau of Investigation (FBI)
- Multnomah County
- Oregon State Police
- U.S. Coast Guard (USCG)
- U.S. Customs and Border Protection (CBP)
- U.S. Immigration and Customs Enforcement (ICE)
- U.S. Marshals Service (USMS)
- U.S. Postal Inspection Service (USPIS)
- U.S. Secret Service (USSS)
- Washington County

## Key Successes

DOJ and area stakeholders have planned to successfully achieve significant interoperability and emergency response communications improvements in the Portland metropolitan area through the implementation of two interoperability solutions. The solutions will support the use of existing interoperability resources and disparate communications systems by extending coverage, capacity, and availability to more public safety agencies. Additionally, in the course of meeting this project's interoperability goals, stakeholders were able to expand the working relationships among local, state, and federal agencies to resolve interoperability objectives for the area.

The first solution planned for interagency communications leverages the City of Portland and the DOJ Integrated Wireless Network (IWN) radio systems. The City of Portland utilizes an 800 megahertz (MHz) trunked radio system that has connectivity to the counties of Clackamas, Clark, Multnomah and Washington as well as the Oregon State Police. The IWN is a very high frequency (VHF) federal trunked radio system with planned use by

the ATF, DEA, FBI, and USMS. In addition, direct access to the IWN will be available to CBP, ICE, USCG, USPIS, and USSS.

The City of Portland and IWN trunked radio systems will be directly connected via a control station audio patch allowing on demand access to established interoperability talk groups within each system. Using control stations, the second solution will establish connectivity between the IWN and Columbia County and the IWN and the Oregon State Police. The level of interoperability among local, state and federal agencies will be substantially enhanced through these interoperable solutions.

To address management issues related to the planned interoperability effort, DOJ worked with several stakeholders to develop standard operating procedures (SOP) to outline the use of interoperability talkgroups and to ensure proper operation of interoperability resources. Assistance also included developing a talkgroup naming template.

## Moving Forward

The cooperation and support between participating agencies and DOJ WMO provided scalable solutions designed to give additional agencies access to the interoperability solutions. Sustained operations, maintenance, and support of these interoperability solutions will be coordinated by key stakeholders. These efforts, along with stakeholder support, will ensure continuity in addressing interoperable communications among public safety agencies in the Portland metropolitan area.

The interoperability solutions are expected to be fully functional by the end of 2006 in conjunction with completion of the IWN build out in the Portland area.

## Contact Information

If you would like to know more about this initiative and the interoperability solutions, please contact—

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# Department of Justice High-Risk Metropolitan Area Interoperability Assistance Project *San Diego, California*



## Addressing Interoperability

The Department of Justice (DOJ) Wireless Management Office (WMO) is working to improve long-term federal interagency communications across the Nation. As an interim step, and as a response to a request from the House/Senate CJS Appropriations Subcommittee staff, the DOJ WMO has been leading the High-Risk Metropolitan Area Interoperability Assistance Project (“25 Cities”) to provide targeted cities with basic and immediate interagency communications capabilities among local, state, and federal agencies during emergency response. Twenty-five cities were selected using criteria that included perceived risk and population size. As stakeholders in 1 of the 25 cities, San Diego metropolitan area, local, state, and federal public safety agencies have been working collaboratively with the DOJ WMO to address basic interoperable communications.

## Participating Agencies

Partnership among San Diego area local, state, and federal public safety agencies has been instrumental in the development of comprehensive interoperability solution sets. Participating agencies have included—

- City of San Diego Fire and Police Departments
- Drug Enforcement Administration
- Federal Bureau of Investigation (FBI)
- Office of Inspector General
- Regional Communications System (RCS)
- San Diego County Sheriff’s Department
- U.S. Customs and Border Protection
- U.S. Immigration and Customs Enforcement
- U.S. Marshals Service
- U.S. Navy Public Safety Office

## Key Successes

DOJ and area stakeholders successfully achieved basic interoperability and emergency response communications improvements in the San Diego metropolitan area through the implementation of three interoperability solutions. The solutions support the use of existing interoperability resources and disparate communications systems by extending coverage, capacity, and availability to more public safety agencies. Additionally, in the course of meeting this project’s interoperability goals, stakeholders were able to leverage and expand the working relationships among local, state, and federal agencies to resolve interoperability issues for the area.

The first solution expands the number of agencies with access to the RCS, a joint radio system providing communications for more than 200 public safety agencies. This solution provides interagency communications via base interface module (BIM)-to-BIM connections routed over microwave circuits to link the consoles of three major public safety radio systems in the area. The connections between the RCS, City of San Diego, and the joint DOJ/Department of Homeland Security (DHS) radio systems provide direct interoperability among local, state, and federal public safety users of these radio systems during large-scale emergency responses.

The second solution extends coverage of two 800 megahertz (MHz) mutual-aid channels and provides new and extended coverage for two very high frequency (VHF) mutual-aid channels

used to support on-scene, interagency communications during major emergencies occurring in the metropolitan area. More specifically, the coverage area of the 800 MHz Fire Mutual Aid Radio System (FIREMARS) and the 800 MHz California Law Enforcement Mutual Aid System (CLEMARS) was expanded by adding 10 sites to the existing systems to provide more consistent coverage in the metropolitan area. In addition, the VHF National Law Enforcement Mutual Aid Radio System (NALEMARS) was implemented, and the coverage area of the VHF CLEMARS was extended by nine new sites. These extensions improve dedicated regional and national mutual-aid channels that users commonly turn to for interagency communications during major responses.

The third solution is the integration of eight 800 MHz control stations tied to the DOJ/DHS console system. This gives each console the ability to communicate and/or patch 58 800 MHz mutual aid trunked talkgroups within the RCS and City of San Diego Communications Systems as well as a county wide “Law CC” talkgroup that is used by all federal, state and local dispatch centers.

In support of these solutions, operational assistance was provided through the development of standard operating procedures (SOP) to ensure effective and sustained use of the interoperability solutions. To coordinate common operating procedures for the new interoperability solutions, DOJ worked with local, state, and federal agencies. This collaborative effort resulted in the development of a SOP to address rules of use for operating on mutual-aid channels. In addition, DOJ provided guidelines for agencies requesting, deploying, and operating mobile audio switches at an incident scene. Area stakeholders continue to meet to update these procedures and discuss interoperability efforts in the San Diego metropolitan area.

## Moving Forward

The cooperation and support between participating agencies and DOJ WMO provided scalable solutions designed to give additional agencies access to the interoperability solutions. Sustained operations, maintenance, and support of these interoperability solutions will be coordinated by key stakeholders. These efforts, along with the area’s long-term interoperability plans, will ensure continuity in addressing interoperable communications among public safety agencies in the San Diego metropolitan area.

## Contact Information

If you would like to know more about this initiative or have questions, please contact—

### RCS Connectivity / Mutual-Aid Channel Extension

Chris R. Hinshaw  
San Diego County Regional Communications System  
(858) 694-3953  
[chris.hinshaw@sdssheriff.org](mailto:chris.hinshaw@sdssheriff.org)

### Standard Operating Procedures

#### Mutual-Aid Channels

David Craig  
Coronado Police Department  
  
(619) 861-1166  
[dcraig@coronado.ca.us](mailto:dcraig@coronado.ca.us)

#### Mobile Audio Switch

Gary Mossa  
BAE Systems, supporting DOJ WMO  
(619) 726-3675  
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# Department of Justice

## High-Risk Metropolitan Area Interoperability Assistance Project

### San Francisco, California



#### Addressing Interoperability

The Department of Justice (DOJ) Wireless Management Office (WMO) is working to improve long-term federal interagency communications across the Nation. As an interim step, and as a response to a request from the House/Senate CJS Appropriations Subcommittee staff, the DOJ WMO has been leading the High-Risk Metropolitan Area Interoperability Assistance Project to provide targeted cities with basic and immediate interagency communications capabilities among local, state, and federal agencies during emergency response. Twenty-five cities were selected using criteria that included perceived risk and population size. As stakeholders in 1 of the 25 cities, San Francisco metropolitan area local, state, and federal public safety agencies have been working collaboratively with the DOJ WMO to address basic interoperable communications.

#### Participating Agencies

Partnership among San Francisco area local, state, and federal public safety agencies has been instrumental in the development of comprehensive interoperability solution sets. Participating agencies have included—

- Bay Area Rapid Transit
- Bureau of Alcohol, Tobacco, Firearms, and Explosives
- California Highway Patrol
- California Office of Emergency Services (OES)
- Federal Bureau of Investigation (FBI)
- Lawrence Livermore National Labs
- National Park Service
- Oakland County
- San Francisco Emergency Medical Services
- San Francisco Fire Department
- San Francisco Police Department
- San Francisco Sheriff's Office
- San Mateo County
- U.S. Coast Guard
- U.S. Customs and Border Protection
- U.S. Drug Enforcement Administration
- U.S. Forest Service
- U.S. Marshals Service
- U.S. Secret Service

#### Key Successes

DOJ and area stakeholders will achieve basic interoperability and emergency response communications improvements in the San Francisco metropolitan area through the implementation of two interoperability solutions. The solutions leverage existing disparate communications systems and add new interoperability capabilities. The two interagency communications solutions implemented in the San Francisco metropolitan area meet immediate interoperability requirements and provide a communications platform to support future growth. Additionally, in the course of meeting this project's interoperability goals, local, state, and federal stakeholders are able to foster working relationships to resolve interoperability objectives for the area.

DOJ is in the process of implementing a SmartLink Internet Protocol (IP) based audio gateway switch crossbanding a five-channel system and a two-channel repeater system. The first solution aims to promote local, state, and federal interoperability through the implementation of five new crossband repeater stations at a strategic San Francisco Bay area site. Three of the repeater stations use existing state and local interoperability frequencies in the very high frequency (VHF) low, ultra high frequency (UHF)-T,

and 800 megahertz frequency bands. Two new digital, narrowband interoperability frequencies in the VHF High and UHF federal government frequency bands complete the five-channel system. Additionally, remote monitor and control or network management responsibilities are shared between the San Francisco Emergency Communications Department (ECD) and the FBI. The crossband configurations include an "always on" mode. Network management responsibilities include the flexibility to de-select one or more repeaters involved in a patch.

To promote federal interdepartmental interoperability, DOJ also implemented two crossband digital narrowband repeater channels in the VHF High and UHF government frequency bands. Additionally, the repeaters can securely transmit voice communications from the digital narrowband stations in either the data encryption standard (DES)—output feedback (OFB) or advanced encryption standard (AES) modes. Encryption and decryption are performed only at the FBI console. The IP-based gateway switch's intelligence prevents the rebroadcast of secure communications over a non-secure channel even when the repeaters are crossbanded.

While primarily reserved for communications among command and control personnel during emergency responses, agents with correctly programmed radios can initiate a call for support or be directed to switch to the interoperability crossband network to receive additional emergency response instructions.

DOJ provided input and guidance on the Bay Area Regional Tactical Communications System (BARTCS) operations document. A sample document of standard operating procedures was provided to local stakeholders to address rules of use for operating on the interoperability channels. San Francisco Bay area agencies continue to meet to update documentation and discuss interoperability efforts in the metropolitan area.

#### Moving Forward

The cooperation and support between participating agencies and DOJ WMO provided scalable solutions designed to give local and state agencies future access to interoperability solutions. Sustained operations, maintenance, and support of this interoperability solution will be coordinated by key stakeholders. These efforts, along with stakeholder support and long-term interoperability planning, will ensure continuity in addressing interoperable communications among public safety agencies in the San Francisco metropolitan area.

#### Contact Information

If you would like to know more about this initiative and the interoperability solutions, please contact—

##### Local and State Interoperability

Michael Griffin  
Golden Gate Interoperability  
Committee, Chair  
California OES/Law Enforcement  
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##### Federal Interoperability

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# Department of Justice High-Risk Metropolitan Area Interoperability Assistance Project *Seattle, Washington*



## Addressing Interoperability

The Department of Justice (DOJ) Wireless Management Office (WMO) is working to improve long-term federal interagency communications across the Nation. As an interim step, and as a response to a request from the House/Senate CJS Appropriations Subcommittee staff, the DOJ WMO has been leading the High-Risk Metropolitan Area Interoperability Assistance Project (“25 Cities”) to provide targeted cities with basic and immediate interagency communications capabilities among local, state, and federal agencies during emergency response. Twenty-five cities were selected using criteria that included perceived risk and population size. As stakeholders in 1 of the 25 cities, Seattle metropolitan area local, state, and federal public safety agencies have been working collaboratively with the DOJ WMO to address basic interoperable communications.

## Participating Agencies

Partnership among Seattle area local, state, and federal public safety agencies has been instrumental in the development of comprehensive interoperability solution sets. Participating agencies have included—

- Bureau of Alcohol, Tobacco, Firearms, and Explosives
- City of Tacoma
- Drug Enforcement Administration
- Federal Bureau of Investigation (FBI)
- Internal Revenue Service
- King County
- Pierce County
- Port of Seattle
- Snohomish County
- U.S. Air Force
- U.S. Coast Guard
- U.S. Customs and Border Protection
- U.S. Forest Service
- U.S. Immigration and Customs Enforcement
- U.S. Marshals Service
- U.S. Navy
- U.S. Secret Service
- Washington State Department of Transportation
- Washington State Emergency Management
- Washington State Patrol

## Key Successes

DOJ and area stakeholders successfully achieved interoperability and emergency response communications improvements in the Seattle metropolitan area through the implementation of three interoperability solutions. The solutions leverage existing communications systems within a three-county area, while also providing new interoperability resources. Additionally, in the course of meeting this project’s interoperability goals, stakeholders were able to leverage and expand the working relationships among local, state, and federal agencies to foster the development of new interoperability objectives for the area.

The first solution directly ties six major public safety radio systems together using microwave or fiber circuits to create the Tri-County Interoperability System (TRIS). These circuits provided dispatcher-to-dispatcher connectivity among the King County, City of Tacoma, Snohomish County, Port of Seattle, Washington State Patrol, and the federal Integrated Wireless Network (IWN) systems. Additionally, these links provide local, state, and federal agencies interoperability at the field user level during major emergencies or daily operations.

The second solution allows out-of-band, out-of-area radio users to communicate via radio with users on the King County, City of Tacoma, Snohomish County, Port of Seattle, and the IWN. Very high frequency (VHF), ultra high frequency (UHF), and 800 megahertz (MHz) radio frequency control stations were connected to the dispatcher consoles of these systems. Using these control stations, out-of-band, and users of disparate radios can access existing talk groups through the dispatchers to allow interagency communications.

To support additional agencies responding to an incident or to establish communications in areas with limited radio coverage, the third solution provides five mobile interoperability audio switches to area agencies. These switches are owned by the FBI, King County, City of Tacoma, Snohomish County, and the Port of Seattle. At an incident scene, each interoperability switch can provide basic voice communications interoperability for up to 12 radio systems. In addition to providing equipment and installation services, DOJ ensured that technicians received training from the audio switch manufacturer, JPS Communications, to effectively operate the new equipment and interoperability capabilities.

In support of these solutions, operational assistance was provided through the development of standard operating procedures (SOP) to ensure effective and sustained use of the interoperability solutions. To coordinate common operating procedures for the new interoperability solutions, DOJ worked with the Tri-County Operations Subcommittee, composed of local, state, and federal agencies. This collaborative effort resulted in the development of an SOP to address rules of use for patching channels to other radio systems and deploying mobile audio switches. The Subcommittee continues to meet to update procedures and discuss interoperability efforts in the Seattle metropolitan area.

## Communication Exercise

On January 21, 2005, participating Seattle agencies held an operational exercise to test the TRIS. During the exercise, dispatchers created patches among the six connected radio systems to test all interoperability talk groups. Simulated traffic was used to evaluate the system performance and operational procedures.

## Moving Forward

The cooperation and support between participating agencies and DOJ WMO provided scalable solutions designed to give additional agencies access to the interoperability solutions. Sustained operations, maintenance, and support of these interoperability solutions will be coordinated by key stakeholders. These efforts, along with the area’s long-term interoperability plans, will ensure continuity in addressing interoperable communications among public safety agencies in the Seattle metropolitan area.

## Contact Information

If you would like to know more about this initiative or have questions, please contact—

### TRIS

Jon Wiswell  
City of Seattle/Regional  
Communications Board  
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### SOP

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Eastside Public Safety Communications  
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# Department of Justice High-Risk Metropolitan Area Interoperability Assistance Project *St. Louis, Missouri*



## Addressing Interoperability

The Department of Justice (DOJ) Wireless Management Office (WMO) has been working toward improving long-term federal interagency communications across the Nation. As an interim step, and as a response to a request from the House/Senate CJS Appropriations Subcommittee staff, the DOJ WMO has been leading the High-Risk Metropolitan Area Interoperability Assistance Project to provide targeted cities with basic and immediate interagency communications capabilities among local, state, and federal agencies during emergency response. Twenty-five cities were selected using criteria that included perceived risk and population size. As stakeholders in 1 of the 25 cities, St. Louis metropolitan area, local, state, and federal public safety agencies have been working collaboratively with the DOJ WMO to address basic interoperable communications.

## Participating Agencies

Partnership among St. Louis area local, state, and federal public safety agencies has been instrumental in the development of comprehensive interoperability solution sets. Participating agencies have included—

- Bureau of Alcohol, Tobacco, Firearms, and Explosives
- Drug Enforcement Administration
- Federal Bureau of Investigation
- Lambert-St. Louis International Airport
- St. Charles County
- St. Clair County (Illinois)
- St. Louis County Police Department
- St. Louis Fire Department
- St. Louis Metropolitan Police Department
- U.S. Coast Guard
- U.S. Customs and Border Protection
- U.S. Immigration and Customs Enforcement
- U.S. Marshals Service
- U.S. Postal Inspection Service
- U.S. Secret Service

## Key Successes

DOJ and area stakeholders have planned to successfully achieve basic interoperability and emergency response communications improvements in the St. Louis metropolitan area through the implementation of a cross banded interoperability solution. The solution will support the use of existing communications resources and provide connectivity between disparate radio system users. Additionally, in the course of meeting this project's interoperability goals, stakeholders were able to expand the working relationships among local, state, and federal agencies to resolve interoperability objectives for the area.

The solution bridges very high frequency (VHF), ultra high frequency (UHF) and expands on existing 800 megahertz (MHz) interoperability resources in “calling” and “tactical” configurations. The VHF (narrowband) and UHF components will provide wide area coverage throughout the metropolitan St. Louis area. The 800 MHz portion will be simulcast and utilize the ICALL and ITAC frequencies to allow for access by any 800 MHz users. Under this configuration, users in VHF, UHF or 800 MHz would utilize the “calling” channel for initial event coordination and then switch operations to the “tactical” channel. These two resources provide access to all VHF (narrowband), UHF and 800

MHz users to coordinate emergency response or on scene operations.

The VHF and UHF equipment will be maintained by the FBI. One of the VHF resources will also serve as a federal interoperability channel. The federal interoperability channel will provide a common frequency for all federal VHF narrowband users to coordinate with local and state agencies or support federal only operations in an encrypted mode. The 800 MHz equipment provided by DOJ will be maintained by St. Charles County and the City of St. Louis.

When implemented, this solution will provide interoperable communications between local, state and federal agencies in the VHF, UHF and 800 MHz bands whether local to the St. Louis area or deployed from across the country. This solution also takes advantage of and leverages existing 800 MHz interoperable communications equipment installed in St. Clair County (Illinois) as part of the Urban Area Security Initiatives federal government grant process.

To address management issues related to the new interoperability equipment, DOJ is working with several stakeholders to develop standard operating procedures (SOP) to outline the use of the cross banded communications equipment and to ensure proper operation of those resources. Assistance will also include the development of interoperability resource guides to serve as quick references for public safety personnel.

## Moving Forward

The cooperation and support between participating agencies and DOJ WMO provided scalable solutions designed to give additional agencies access to the interoperability solutions. Sustained operations, maintenance, and support of these interoperability solutions will be coordinated by key stakeholders. These efforts, along with stakeholder support, will ensure continuity in addressing interoperable communications among public safety agencies in the St. Louis metropolitan area.

The interoperability solutions are expected to be fully functional by the end of 2006.

## Contact Information

If you would like to know more about this initiative and the interoperability solutions, please contact—

### VHF, UHF and 800 MHz bridge and Federal Interoperability Channel

Ken Roth  
FBI  
(314) 589-2702  
kroth@leo.gov



# Department of Justice High-Risk Metropolitan Area Interoperability Assistance Project *Tampa, Florida*



## Addressing Interoperability

The Department of Justice (DOJ) Wireless Management Office (WMO) is working to improve long-term federal interagency communications across the Nation. As an interim step, and as a response to a request from the House/Senate CJS Appropriations Subcommittee staff, the DOJ WMO has been leading the High-Risk Metropolitan Area Interoperability Assistance Project (“25 Cities”) to provide targeted cities with basic and immediate interagency communications capabilities among local, state, and federal agencies during emergency response. Twenty-five cities were selected using criteria that included perceived risk and population size. As stakeholders in 1 of the 25 cities, Tampa metropolitan area, local, state, and federal public safety agencies have been working collaboratively with the DOJ WMO to address basic interoperable communications.

## Participating Agencies

Partnership among Tampa area local, state, and federal public safety agencies has been instrumental in the development of comprehensive interoperability solution sets. Participating agencies have included—

- Bureau of Alcohol, Tobacco, Firearms, and Explosives
- City of Tampa
- Drug Enforcement Administration (DEA)
- Federal Bureau of Investigation (FBI)
- Florida Department of Fish and Wildlife Conservation
- Florida Department of Law Enforcement
- Florida Department of Transportation
- Florida Highway Patrol
- Hillsborough County
- Internal Revenue Service
- Pinellas County
- Port of Tampa
- Tampa International Airport
- U.S. Coast Guard
- U.S. Customs and Border Protection
- U.S. Immigration and Customs Enforcement
- U.S. Marshals Service (USMS)
- U.S. Secret Service

## Key Successes

DOJ and area stakeholders successfully addressed basic interoperability and emergency response communications improvements in the Tampa metropolitan area through the implementation of three interoperability solutions. The solutions support the use of planned interoperability and communications systems by extending access to more public safety agencies. Additionally, in the course of meeting this project’s interoperability goals, stakeholders were able to leverage and expand the working relationships among local, state, and federal agencies to resolve interoperability objectives for the area.

DOJ recognized that several programs were working to address interoperability in the Tampa metropolitan area. DOJ coordinated with these local, state, and federal programs to offer assistance. One effort is the Florida State Technology Office’s implementation of the Florida Interoperability Network (FIN) via a Motobridge switch to provide effective interagency communications via radio system connections and access to mutual-aid channels for local and state law enforcement agencies. The FIN has more than 200 dispatch centers participating and is capable of extending access to additional agencies via interconnectivity at participating local

dispatch centers. In coordination with the Florida State Technology Office, DOJ purchased a Motobridge dispatch workstation and radio gateway unit for expanded Pinellas County Emergency Operations Center access to the FIN. Consolelets installed at the Pinellas County EOC provide connectivity to the FIN for DEA, FBI, USMS, and local hospital emergency medical services teams. FIN connectivity allows dispatchers to patch radio users to law enforcement officers across the state on an as-needed basis.

A second solution provided two ACU-T’s to the City of Tampa, two ACU-T’s to Pinellas County, and one ACU-T and one ACU-1000 to Hillsborough County to support on-scene interagency communications. These mobile audio switches will be operated, maintained, and available for Tampa area deployments.

The third solution is a 350 watt federal interoperability VHF repeater with five receiver sites affording on-street and mobile coverage in the greater Tampa area. Agencies with P25 VHF radios will be able to access this channel, which can also be patched into the Pinellas County Motobridge switch. This repeater system is scheduled for installation in summer-fall, 2006.

To coordinate use of the new interoperability capabilities, DOJ worked with the Tampa Bay Regional Domestic Security Task Force Interoperability Communications Subcommittee to identify state and federal participants to join the local agency members. The Subcommittee and area stakeholders continue to meet to discuss interoperability efforts in the Tampa metropolitan area.

## Moving Forward

The cooperation and support between participating agencies and DOJ WMO provided scalable solutions designed to provide additional agencies future access to the interoperability solutions. Sustained operations, maintenance, and support of these interoperability solutions will be coordinated by key stakeholders. These efforts, along with the State of Florida’s long-term interoperability plans to implement a statewide law enforcement radio system, will ensure continued improvements to interoperable communications among public safety agencies in the Tampa metropolitan area.

## Contact Information

If you would like to know more about this initiative or have questions, please contact—

### DOJ Project/Mobile Audio Switches

Pam Montanari  
Pinellas County Emergency Communications  
(727) 582-2509  
[pmontana@co.pinellas.fl.us](mailto:pmontana@co.pinellas.fl.us)

### State of Florida Interoperability

Linda Fuchs  
State Technology Office  
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### Federal Interoperability

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# Department of Justice High-Risk Metropolitan Area Interoperability Assistance Project *Washington, DC*



## Addressing Interoperability

The Department of Justice (DOJ) Wireless Management Office (WMO) has been working toward improving long-term federal interagency communications across the Nation. As an interim step, and as a response to a request from the House/Senate CJS Appropriations Subcommittee staff, the DOJ WMO has been leading the High-Risk Metropolitan Area Interoperability Assistance Project to provide targeted cities with basic and immediate interagency communications capabilities among local, state, and federal agencies during emergency response. Twenty-five cities were selected using criteria that included perceived risk and population size. As stakeholders in 1 of the 25 cities, Washington, DC metropolitan area local and federal public safety agencies have been working collaboratively with the DOJ WMO to address basic interoperable communications.

## Participating Agencies

Partnership among Washington, DC area local and federal public safety agencies as well as the private sector has been instrumental in the development of comprehensive interoperability solution set. Participating agencies have included—

- Bureau of Alcohol, Tobacco, Firearms, and Explosives (ATF)
- CSX Police
- DC Fire and Emergency Medical Services
- DC Metropolitan Police Department
- Drug Enforcement Administration (DEA)
- Federal Bureau of Investigation (FBI)
- Federal Protective Service
- U.S. Army
- U.S. Capitol Police
- U.S. Coast Guard (USCG)
- U.S. Customs and Border Protection (CBP)
- U.S. Immigration and Customs Enforcement (ICE)
- U.S. Marshals Service (USMS)
- U.S. Park Police
- U.S. Postal Inspection Service (USPIS)
- U.S. Secret Service (USSS)

## Key Successes

DOJ and area stakeholders have planned to successfully achieve basic interoperability and emergency response communications improvements in the Washington, DC metropolitan area through the implementation of a cross band interoperability solution. The solution will support the use of existing communications resources and provide connectivity between disparate radio system users. Additionally, in the course of meeting this project's interoperability goals, stakeholders were able to expand the working relationships among local and federal agencies to resolve interoperability objectives for the area.

The solution bridges very high frequency (VHF) and ultra high frequency (UHF) resources to support local to federal and federal to federal operations. One cross banded VHF/UHF resource will support federal VHF and UHF users with direct access and connectivity with the District of Columbia Fire and EMS and Police. This resource will provide portable radio coverage in the DC area utilizing several repeater and satellite receiver sites.

The second VHF/UHF cross banded resource supports federal only operations for federal VHF and UHF users requiring encrypted communications. This resource provides coverage to users substantially north and south of the DC metropolitan area through several repeater and satellite receiver sites. Both the VHF and UHF equipment will be maintained by the USMS.

When implemented, this solution will provide interoperable communications between local and federal agencies in the VHF and UHF bands whether they are local to the DC area or deployed from across the country. This solution can also take advantage of and leverage existing interoperable communications connectivity available through the DC Emergency Communications Center.

To address management issues related to the new interoperability equipment, DOJ worked with local and federal stakeholders to develop standard operating procedures (SOP) to outline the use of the multi-band communications equipment and to ensure proper operation of those resources. Assistance included developing SOPs and other interoperability resource guides to serve as quick references for public safety personnel.

## Moving Forward

The cooperation and support between participating agencies and the DOJ WMO provided scalable solutions designed to give additional agencies access to the interoperability solutions. Sustained operations, maintenance, and support of these interoperability solutions will be coordinated by key stakeholders. These efforts, along with stakeholder support, will ensure continuity in addressing interoperable communications among public safety agencies in the Washington, DC metropolitan area.

The interoperability solutions are expected to be fully functional by the end of 2006.

## Contact Information

If you would like to know more about this initiative and the interoperability solutions, please contact—

### USMS

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### DOJ WMO

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